

# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

## The Astrogram

AMES RESEARCH CENTER, MOFFETT FIELD, CALIFORNIA

VOLUME IV

JANUARY 4, 1962

NUMBER 6

### Ira H. Abbott Retires



Ira H. Abbott, Director of Advanced Research and Technology, NASA, retired January 2 after more than 32 years of Government service. He plans to devote his full time to personal affairs.

James E. Webb, Administrator, expressed regret over Mr. Abbott's decision to retire.

"His achievements and his leadership in research have served in very important ways to advance our country from the forefront of aeronautics to the forefront of space", Webb said.

"All of us in NASA are proud of his long, untiring and selfless service to our Nation's good".

No successor has been named. Thomas F. Dixon, Deputy Associate Administrator, will serve as the Acting Director of Advanced Research and Technology in addition to his present duties.

Mr. Abbott has been engaged in scientific research for the Government since his graduation from the Massachusetts Institute of Technology in 1929. He is in-

ternationally known for his leadership in aeronautical research, and his career has paralleled the rapid development of airplanes and space vehicles over the past several decades.

He began his career at the Langley Aeronautical Laboratory of the National Advisory Committee for Aeronautics, predecessor of NASA, as a junior aeronautical engineer. He advanced to positions of increased responsibility at the Laboratory, becoming Assistant Chief of Research in 1945.

After transferring to the NASA Washington Headquarters in 1948, he was appointed Assistant Director of Research (Aerodynamics), a position he held until the NASA was established in 1958. He was promoted to Director of Advanced Research Programs in 1959, and to his most recent post last November 1.

Mr. Abbott made his early contributions in Aerodynamics research, writing a large number of technical reports on

### SETH ANDERSON TO SPEAK BEFORE SCIENCE SEMINAR GROUP

Seth B. Anderson, Research Engineer in Flight and Systems Simulation Branch, is scheduled to speak before the students of the Palo Alto Community Science Seminar Wednesday evening, January 24. His topic will be "Potentials of VTOL Aircraft".

Topics of previous programs in the series have been "How Ore Deposits are Formed", by Dr. Konrad B. Krauskopf, Professor of Geochemistry, Stanford University; "Plasma Physics and the Problem of Nuclear Fusion", by Dr. Thomas O. Passell, Physicist, Stanford Research Institute; "Staphylococcus Infection", Dr. Harold J. Simon, Assistant Professor of Medical Microbiology and Medicine, Stanford Medical School; and "The Safety of Food Additives", Dr. Ralph W. Fogleman, Vice President, Hazelton-Nuclear Science Corporation.

### REPRESENTATIVE RANDALL RECENT AMES VISITOR

Representative William J. Randall of Missouri, member of the House Science and Astronautics Committee was a visitor to Ames Tuesday, December 19.

After a tour of the Hypervelocity Ballistic Range, 5-degree simulator and 3.5-Ft. Wind Tunnel, Mr. Randall left Ames to continue his inspection of West Coast space research facilities.

wind tunnels, airship aerodynamics, laminar flow, and theory of wing sections. He was instrumental in establishing programs for high-speed research airplanes, for the creation of many unique research facilities of the NACA and NASA, and for the scientific efforts leading to success in supersonic flight. Among present re-

(Continued on Page 4)



## Representative Fulton Visits Ames



Visiting Ames Friday, December 22 was Representative James C. Fulton of Pennsylvania, member of the House Science and Astronautics Committee. Mr. Fulton made a brief tour of several Ames facilities including the 5-degree simulator and the 3.5-Ft. Wind Tunnel during his stay. After a luncheon with Ames officials he resumed his tour of West Coast NASA installations.



### DUPLICATE BRIDGE CLUB TO BE FORMED

Interest expressed by a number of Center employees has prompted the Ames Entertainment Committee to sponsor the forming of a duplicate bridge club. Scheduled to meet Friday

evenings, time and place will depend on the number of regular players.

Objective of the club is to attain sufficient recognition so that Masters points may be awarded for winning play. Interested employees should contact Art Kaskey, ext. 224.

## Scholarship Available to Children of Career Employees

The Federal Personnel Council of Northern California has established a college level scholarship award of \$350 for outstanding high school graduates from Federal families. One award per year will be made on the basis of high school record, college aptitude and leadership potential.

Candidates must be a son or daughter of a career employee presently employed in a Federal agency located in Northern California, or a son or daughter of a retired or deceased employee who had been a career employee employed in a Federal agency located in Northern California. Candidates must be a high school senior at the time of applying. The winner will receive the award upon enrollment in any recognized junior college or accredited college or university, public or private.

A 2000-word essay on the subject "The Federal Government's Impact on Life in my Community" is to be submitted as part of the application for the scholarship. The essay will be rated on its excellence of thought, style and message.

Applications may be obtained by writing to the Scholarship Committee, Federal Personnel Council of Northern California, 12th U.S. Civil Service Region, 630 Sansome Street, San Francisco, California.

Deadline for receipt by Scholarship Committee of application and attachments is March 15, 1962.

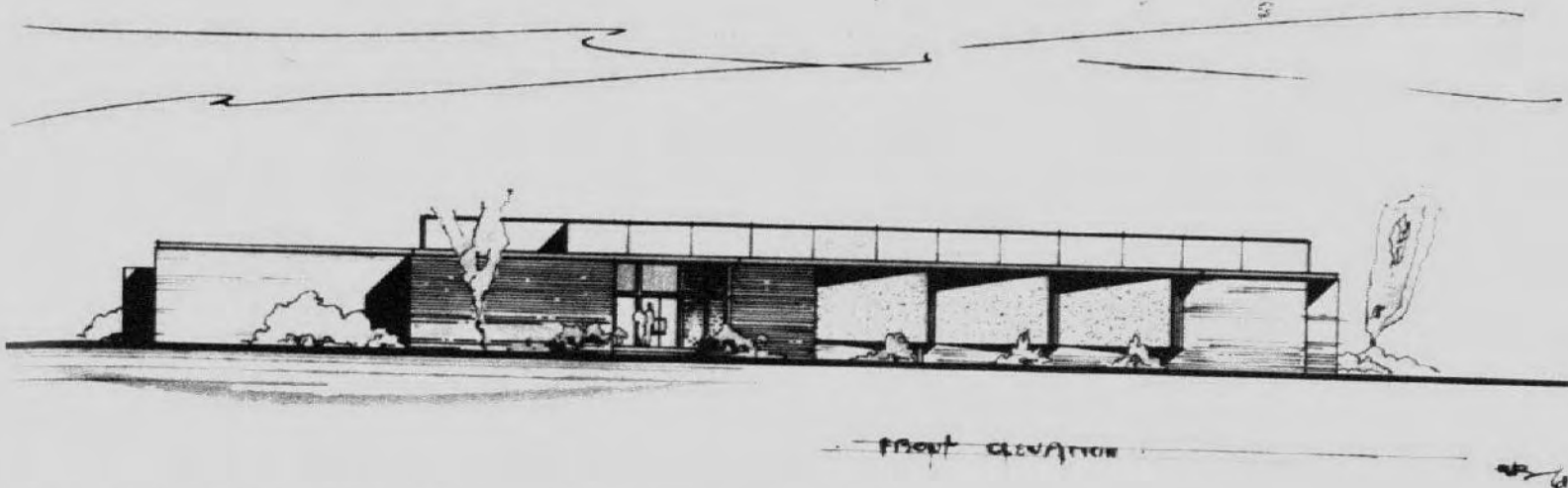
### BLOODMOBILE VISIT SCHEDULED JANUARY 24

The Santa Clara Valley Bloodmobile will visit Ames Wednesday, January 24, from 9 a.m. until noon.

All Ames employees who wish to donate blood may sign up on the sheet provided for that purpose in each branch office or call Personnel, ext. 411, for an appointment. As before, members of an employee's family may donate also.

Blood on deposit at the Blood Center is available to all Ames personnel and their immediate families.





## Ames Cafeteria to be Operated Under Contract Management

### New Building Planned

The Ames Exchange has announced that the Ames Cafeteria will be under new management effective Monday, January 8. Operating the Cafeteria on a contract basis will be the Stewart-Hill food service organization of Berkeley.

The decision to operate the Cafeteria on a contract with a food service company was based on an extensive study of various industrial cafeteria operation techniques. The large scale buying power and specialized management offered by contract operation can be expected to result in improved service and quality.

Also announced by the Exchange is the plan for construction of a new cafeteria, to be located on the triangular piece of ground near the intersection of King, Durand and McCord Roads. To be in operation late this summer, the new cafeteria will be larger than the present facility and contain the latest in food handling equipment. It is anticipated that the air-conditioned structure will seat between 300-400 persons. An artist's conception of the proposed building is shown at the top of this page.

To the Employees of Ames Research Center:

Stewart-Hill welcomes this opportunity to be of service to you of Ames Research Center by taking over the handling of your cafeteria operation. We feel that with our experience and competent personnel we will be able to do a job that will meet with your approval, and we look forward to a cordial relationship.

We believe you will be interested in a brief history of the origin and growth of our company. It was founded twenty-five years ago by W. P. Stewart, Jr. who shortly thereafter formed a partnership with B. W. Hill. As the business grew, the partners incorporated in California under the name of Stewart-Hill. Since that time, we have expanded our operations to include not only the operation of industrial plant cafeterias but many other types of specialized food service throughout California, Arizona and Colorado. Our main offices are located in Berkeley, Fullerton, and Phoenix. In each of these locations, we maintain central warehouses to enable us to take advantage of volume buying and also give maximum service to our various units.

Some of the accounts with which we are associated are: Van Camp Seafood Company, (three operations, including The Pirate Ship at Disneyland); Allstate Insurance Company; Nortronics (Division of Northrop Corporation); and Star-Kist Foods, Incorporated. These are in the southern part of the state and handled from our Fullerton office. From our Berkeley office, we handle Union Oil Company, Colgate-Palmolive Company, Desoto Chemical Coatings, Incorporated, California Packing Corporation, and just this month we opened the cafeteria in the new Federal Building in Sacramento.

Your chef-manager will be James L. Flanagan who has been with us for the past ten years in the Bay Area and has a total of thirty years experience in many types of food service. He resides with his family in the San Jose area. We are sure that you will find him most congenial and cooperative.

William F. Begenich is our cafeteria supervisor in the San Jose area and will be assisting Jim in the operation of your cafeteria. Before coming to our organization, Bill had thirty-one years of experience in the food service business in Saudi Arabia as well as in the states of Washington, Oregon and California. You will find him, too, cooperative in every way.

We would like to have you consider us as a part of your organization, so please feel free to offer any comments or criticisms you may have to Jim or Bill. They will follow up and will make any necessary adjustments as promptly as possible. Your suggestions will greatly assist us in performing the type of service you expect and the type of job we intend to do.

Stewart-Hill Corporation

#### Astrogram

Room 111  
Administration Building  
Phone 385

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Edited by.....Brad Wilson and Don Schilling.  
Reporters.....NASA Employees

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Thursday between publication dates.



ABBOTT...  
(Continued from Page 1)

search technology programs he supervised, are the X-15, the Nuclear Rocket and advanced re-entry programs of great importance to NASA's manned lunar project.

He was born July 18, 1906, in Wolfeboro, New Hampshire, and now makes his home in Chevy Chase, Maryland.

## Ames Airings

.....by  
Sharon Scharmen

Sharing their first Christmas together are KATHLEEN MENZEL (Library) and her new groom, Anthony Gonzales, who were married on December 23, 1961, at Carson City, Nevada. The newlyweds are residing in Hayward at the present time and plan to move to the Santa Clara Valley in the near future.....We pass along the following "Ten Commandments" for all Girl Fridays (better known as secretaries) for the new year of 1962. (From an article in the December 29 issue of San Jose Mercury-News).

1. Thou shalt powder thy nose in the room specified for that purpose.
2. Thou shalt not edit the boss' dictation to thine own satisfaction.
3. Thou shalt not incriminate the city's transportation system for thy tardiness.
4. Thou shalt telephone thy boy friends and relatives on thine own time.
5. Thou shalt not bear false witness against thy fellow workers for thine own misgivings.
6. Thou shalt retain the incidents of thy boss' business within the confines of thy notebook.
7. Thou shalt not covet thy boss' income.
8. Thou shalt maintain the neatness of thine office as thou wouldst thine own home.
9. Thou shalt accept thy boss' last word and keep it holy.
10. Honor thy wonderful, brilli-

## Want Ads

For sale-1946 Ford Pickup 1/2 ton, 4 speed transmission, new paint, top condition. Call Earl Brooks RE 9-3839.

For sale-1954 Ford Victoria hardtop. Call Kent Bourquin 948-8187.

For sale-3 bedroom, 2 bath Eichler home, large separate sound-proofed family room, workshop, study, many built-in features, professionally landscaped, located in Palo Alto. FHA or conventionally financed. \$23,750. Call DA 5-3018.

For sale-Projection screen, 50" x 50", lenticular type, on stand, complete with fibre carrying case. \$25.00 - Call S. C. Hanscom YO 7-9207.

Wanted - To share apartment with girl between the ages of 21 to 30. Phone: YO 8-5720.



GUARD JOHN PAQUETTE  
RETIRES

John G. Paquette, Guard at Ames for the past five years retired Tuesday, January 2, with more than 15 years Federal service.

Paquette came to Ames in January, 1957 from the U. S. Naval Fuel Annex, Richmond, California, where he held the post of Captain of the Fire Department. It was at that installation that he performed an act of heroism above the call of duty that saved the life of a fellow employee and that will always reflect credit on his record.

One stormy day in December, 1951 he received a call for assistance from the dock area. A barge was threatening to break loose from its moorings in the heavy seas. Aboard the barge was the unconscious watchman, victim of a heart ailment. Paquette boarded the barge hand-over-hand down a mooring line, often completely covered by waves, and pulled the stricken man away from the edge of the deck where he had been in danger of being washed overboard. Staying with the man until help arrived, Paquette was continually in grave danger of injury himself. Commendations from high Navy officials were received by Paquette for this display of selfless devotion to duty.

His firefighting training has enabled him to spot potentially dangerous fire hazards during his rounds at Ames, and he has been instrumental in developing the swingshift fire crew from the Machine Shop, demonstrating equipment and familiarizing the crew with firefighting procedures. His plans for the future are indefinite.

### NEW ACTIVITIES LISTED BY MOUNTAIN VIEW RECREATION DEPARTMENT

Starting with the new year several group activities will be sponsored by the Mountain View Recreation District.

Monday nights at the Mountain View High School Girls' Gym a program of exercises, basketball, volleyball, badminton and swimming will be held for men. Starting January 15, 1962, the activity will continue for eight weeks and cost \$2.50.

Paddle tennis tournaments will be held Tuesday nights at the Adobe Building, 157 Moffett Blvd. starting January 9.

Beginner lessons in bridge will start Wednesday evening, January 10 in the Adobe Building on Moffett Blvd. Cost for 10 weeks of instruction will be \$5 per person.

Dancing lessons including the Foxtrot, Tango, Rhumba, Swing, Waltz and Cha-Cha will be given Thursday evenings at Graham School, 1035 Castro Street in Mountain View beginning January 4.

On Friday evenings at the Adobe Building Beginning Square Dance will be taught. Details for this class and further information about the Department's recreation program may be obtained at the MVRD office, 157 Moffett Blvd., YO 7-7211, ext. 71.

ant, inexhaustible, incomparable, handsome paymaster with the respect he so righteously merits.



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### Dr. Bader Attends

### Explorer XII

### Symposium at Goddard

Dr. Michel Bader, Chief of Physics Branch, is currently attending the Explorer XII Symposium at Goddard Space Flight Center. Purpose of the Symposium is the discussion of information received from the various instrument packages aboard the satellite launched August 15, including Dr. Bader's proton analyzer experiment designed to transmit data on the energy distribution of streams of protons with energies varying from 0.2 to 20 thousand electron volts.

A press conference will be held at the close of the meeting Friday, January 19 in Washington, D. C. in which Dr. Bader will also participate.

### Office of Manned Space Flight Announces Establishment of Management Council

A Management Council of top NASA officials responsible for the Agency's manned space flight programs has been instituted to hasten development of spacecraft, boosters and support equipment necessary for the success of these programs.

Formation of the Management Council of the Office of Manned Space Flight was announced by D. Brainerd Holmes. Mr. Holmes is Director of the Office of Manned Space Flight and Chairman of the Management Council.

Members of the Council, in addition to Mr. Holmes, are: Robert R. Gilruth, Director of the Manned Spacecraft Center, Langley Field, Virginia; Walter C. Williams, Associate Director for Operations, Manned Spacecraft Center; Wernher Von Braun, Director of the Marshall Space Flight Center, Huntsville, Alabama; Dr. Eberhard F. M. Rees, Deputy Director for Research and Development, Marshall Space Flight Center.

From NASA Headquarters, Washington, D. C., are George M. Low, Director of Spacecraft and Flight Missions; Milton W. Rosen, Director of Launch Vehicles and Propulsion; Charles H. Hoadman, Director of Aerospace Medicine; William E. Lilly, Director of Program Review and Resources Management; and Joseph F. Shea, Deputy Director for Systems Engineering.

Mr. Holmes said the Council would meet regularly once a month. He said special meetings would be called as required and that other members may be added later.

"The purpose of the Council

is to spot and identify problems as early as possible and to resolve them quickly," Mr. Holmes said.

The Council will enable us to establish clear understandings on such matters as goals, schedules, pacing items and the so-called interface problems, matters that are not solely the concern of either the Manned Spacecraft Center or the Marshall Space Flight Center.

"Regular meetings of the key field center and Headquarters people," Mr. Holmes added, "will bring about closer Cooperation and enable us to exercise the best judgement in reaching the important decisions that lie ahead in Project Mercury, the Advanced Mercury Program and Project Apollo."

### BOISSEVAIN SPEAKER AT ASME MEETING

Al Boissevain of Supersonic Free-Flight Branch was guest speaker at the January 11 meeting of the Santa Valley Subsection of the American Society of Mechanical Engineers, held at the Old Plantation Restaurant in Los Altos.

Topic for his discussion was "Research for Space Flight and Return." During his slide and blackboard presentation he outlined the mathematical reasons for the certain altitude and speed regimes necessary for successful atmosphere entry, the areas of research in which Ames is engaged, and the equipment being utilized here to solve space flight problems.

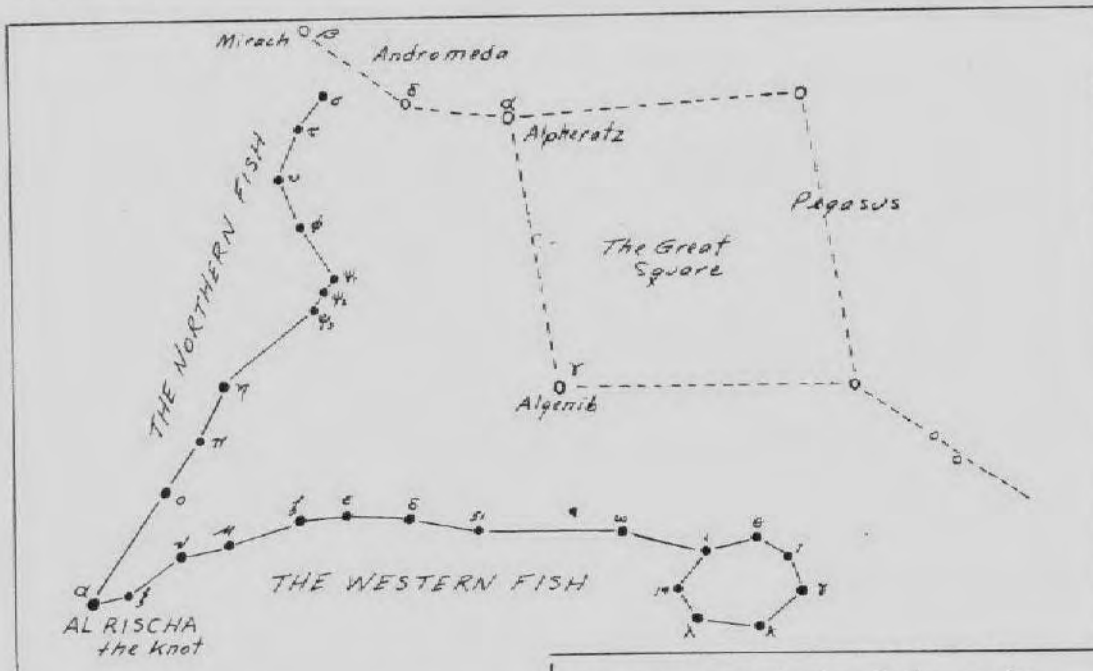
### STILL ROOM FOR MORE IN DUPLICATE BRIDGE CLUB

Art Kaskey of Structural Dynamics Branch reports that response to the call for duplicate bridge players has been good, but a few more enthusiasts are needed to form the Ames club.

A meeting night of Friday has been proposed, but is not definite as yet. Members will vote on this and other matters of procedure at the first official meeting, to be scheduled in the near future.

All Ames employees who wish to participate in the club's activities are invited to contact Kaskey at ext. 224 at their earliest opportunity.





## Astroventuring...

with walt krumm

### KNOW THE SKY

#### PISCES (The Fishes)

Pisces is an inconspicuous but interesting member of the zodiacal constellations. It is represented by two fishes, each with a ribbon tied to its tail and with the ends of the ribbons tied in a knot. The Western Fish is most easily found. Look for a circlet of stars just south of the Great Square of Pegasus. Then follow a faint line of stars almost directly east to the bright star Al Rischa. This star marks the knot in the ribbons and its Arabic name means "The Knot." The Northern Fish can be followed from here northeast to just below Beta Andromedae or Mirach.

The beautiful Venus and her son Cupid were walking along the banks of the river Euphrates when the terrible giant Typhon approached them. To escape the giant, Venus and Cupid threw themselves into the water and assumed the form of fishes. To commemorate this fortunate escape, Minerva placed the two Fishes in the sky.

The constellation apparently got its name from the fact that the Sun is in this constellation during the rainy season of the year. The Babylonians, Syrians, Turks, Persians and Greeks all regard this constellation as representing two fish. The fishes were considered the national constellation of the Jews and a fish

was the symbol of the early Christians.

Due to the precession of the equinoxes or the "top-like" movement of the Earth's axis, the First Point of Aries is no longer in Aries as when the constellations were named but is now in Pisces. This is the place which the Sun occupies on the first day of Spring and the meridian from which astronomical measurements are made.

The stars of Pisces and most particularly Nu Pisces are often occulted by the Moon in its eastward motion through the skies. Because the motion of the Moon is so erratic and uncertain, occultations of stars by the Moon give a means of "up-dating" the position of the Moon. This is a phase of astronomy - the timing and reporting - that the amateur can enter into. The British ephemeris astronomers are quite interested in data of this type.

If you have a telescope, take a look at Al Rischa, a blue and green double star of 2.5 seconds separation.

## Ames Airings

.....by  
Sharon Scharmen

Still "tingling" is LU EMEL (Photo) who modeled a \$4000 mink coat for the Peninsula Christian Business and Professional Women's Club fashion show held at the El Rancho Restaurant in Palo Alto Tuesday evening, January 9. Incidentally, Lu will become Chairman of the group in February ..... Walking the floor with No. four these mid-nights is GARY CHAPMAN (SSFF). Mark John arrived on December 16 to grace the Chapman household with his husky 8 lbs. 9 ounces.....GRANDPA CITTI of the Machine Shop is bragging about his newest grandson born to BARBARA & HANK, JR. (formerly of Ames) on January 2 of this new year. Mica Byron arrived weighing 8 lbs. and 12 ounces.....No doubt DAVID WARNER's (GSC) soft southern drawl aided him in winning southern belle Beulah Long of Stillwater, Oklahoma, for his bride. The former Miss Long became Mrs. Warner on December 30 at the Warner home in Tye, Texas, in an informal wedding ceremony. After their honeymoon trip to California, the newlyweds took up residence in Mountain View.....MEL FOHRMAN (HT) had to give his roommate an eviction notice when he exchanged vows with Nadine Fields in Redwoods City on December 24 at the Temple Beth Jacob Synagogue. The happy couple honeymooned for a couple of days in beautiful Carmel and then drove down to Mexico. They are now residing in Palo Alto.

## BOWLING

.....by  
Dee Carr

After a week's vacation, the All Ames League got back into full swing on January 4th with Barrett Baldwin (Striking Dynamos) bowling a 253 game and Clark White (Pinbusters) notching a 598 series with a 222 game. Shyrle Coe (Striking Dynamos) had a 198 and Elsie Baxter (Bahude)

followed closely with a 197. Team standings as of January 11 are:

	Won	Lost
SSFF	19	5
Electrical	17	7
Afterburners	15	9
Pinbusters	14	10
HBR	13	11
Shwiki	12½	11½
Striking Dynamos	12	12
Machine Shop	11½	12½
Mavericks	11	13
Orbinauts	8	16
Bahude	7	17
EMC	4	20



## Ames Closeup



DR. WEBB HAYMAKER

Dr. Webb Haymaker, Assistant Director for Life Sciences, came to NASA from the Armed Forces Institute of Pathology, Washington, D. C., where he had held the post of Chief, Neuropathology Branch since 1942. Accepting the position of Assistant Director in April, 1961, he was engaged in organizing the Ames Life Sciences facility from that time until November, 1961, when he established his permanent office here.

At the Institute of Pathology his major duties were in the fields of diagnostic neuropathology, teaching and research. Extensively experienced with special methods of investigating the nervous system, he and a number of distinguished associates (including his wife, the former Dr. Evelyn Anderson, a noted physiologist in her own right) have authored scores of publications in the field of medical research, including those on hypoxemia, heat stroke, decompression sickness and ultrasonic and ionizing radiation effects.

Dr. Haymaker's experience is especially broad in the radiation biology field, and he has frequently been chairman of the neuropathological sessions of national and international radiation symposia. His contributions in the field of neuropathology have been recognized in world medical circles, and led to his election as President of the IVth International Congress of Neuropathology held in Munich last September. He represents the United States in the Commissions of Neuropathology and Tropical Neurology of the World Federation of Neurology, and was President of the American Association of Neuropathologists

## Personnel-ly Speaking

### Financial Protection for Federal Employees

The Federal Government provides many valuable protections for its employees against loss of income because of sickness, accidents, and layoffs. Information about these benefits will be published here from time to time so that you can familiarize yourself with them and their relationship with one another. A knowledge of these matters will help in planning your insurance and other private financial programs. It will also provide a basis for comparison between Federal employment benefits of this kind and those offered by other employers.

### Sick Leave

Sick leave may be taken only when you are too ill to work or when you have to visit your physician or dentist; however, it may be conserved and accumulated without limit. Properly used, it is the employee's insurance against loss of income, even in cases of prolonged illness. Many employees have saved more than 1,000 hours of sick leave. If one of these employees should suffer an extended illness, he would draw his full pay while incapacitated for 25 weeks or more.

Sick leave is credited at the rate of 13 days each year, or the equivalent in working time of 2 weeks and 3 days. It has been estimated that roughly comparable protection through privately purchased insurance would cost the average-paid worker \$95 a year.

### On-Job Injury

If you are injured on the job, you are entitled to free medicine and medical attendance, plus free hospitalization if you need it. If you do not have sick and annual leave, or do not choose to use them for this purpose, you are also entitled to money benefits for the time you are off the job. There is a 3-day waiting period before these money benefits begin, unless you sustain a permanent injury or unless your disability lasts longer than 21 days beyond any sick or annual leave you choose to use.

For permanent on-job disabilities, an employee with dependents gets about three-fourths pay, and an employee without dependents gets about two-thirds pay. Occupational diseases are also covered by these benefits, and there is additional compensation for loss of eye-sight or of an arm or leg.

For permanent and total disabilities, the compensation may continue for life, and should the former employee's condition require a constant attendant, an additional maximum of \$125 a month may be allowed.

You should remember to report every on-job injury to your immediate supervisor without delay, and also to get first-aid treatment promptly. Your supervisor, or Personnel, Room 109 will help you fill out the proper notice of injury.

in 1955-56.

A native of Washington, D. C., his early medical training was received at Clemson College and the Medical College of South Carolina, Charleston, S. C. Following further study in Europe at the Universities of Wurzburg and Vienna, he held various intern, resident and research posts in hospitals both in the United States and abroad.

No stranger to the Bay Area, Dr. Haymaker held the position of Assistant Clinical Professor of Neurology and Lecturer in Neuroanatomy at the University of California School of Medicine in Berk-

eley from 1936 until accepting his post with the Armed Forces Institute of Pathology in 1942. He has also been professorial lecturer in anatomy at the George Washington University School of Medicine, and associate professor of neurology at the Georgetown University School of Medicine, Washington, D. C.

Dr. and Mrs. Haymaker have now established their home at 16181 Greenwood Lane, Los Gatos. They have three children, Ingrid (Mrs. Ted Becher), Evelyn and Richard.



## Winter Sports Events to Highlight Ames Snow Trip to Squaw Valley

Ames employees planning to go on the Ames Snow Trip to Squaw Valley February 16 - 18 will have ringside seats at two spectacular winter sports events planned for that weekend. The Pacific Coast Speed Skating Championships will be held Saturday and the Pacific Coast Barrel Jumping Contest will follow on Sunday.

Facilities at the snow resort have recently been extensively remodeled and offer all the comforts of home plus many extras. The 300 rooms of the athletes' dormitories have been turned into multi-unit chalets suitable for year-round use, and are comfortably furnished, well heated and boast an excellent double and single bed in each room.

Other facilities include an all-

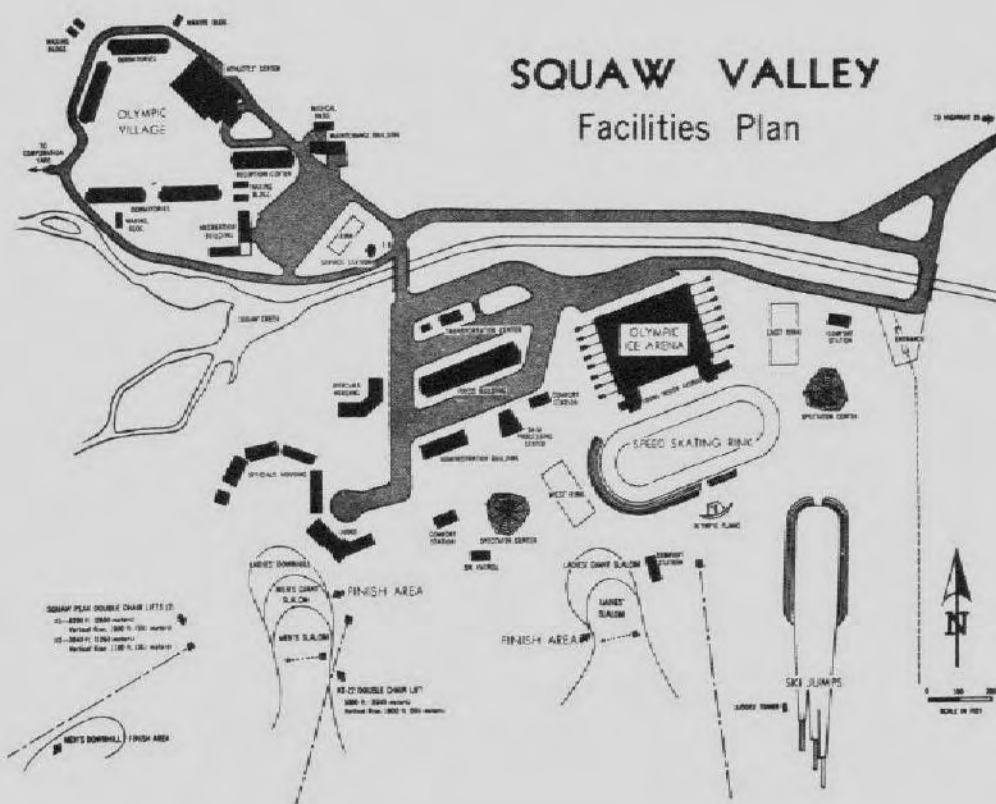


new lounge with a warm, fire-lighted atmosphere featuring

mountain and folk music, a large, fully equipped cafeteria, an inviting heated pool, sauna bath and massage service for bone-weary skiers, and a Ski and Sport Shop with a complete line of snow clothing and equipment, rental skis and boots and free ice skates.

The Ames package trip costs less than \$30 per person and includes round-trip Greyhound bus fare, lodging for two nights, and two breakfasts, two dinners and a box lunch. A 10% reduction in ski lift prices is also included.

For reservations attach check for full amount payable to the Ames Entertainment Committee to the completed blank below and mail to James Patterson, Electronic Instrument Branch, ext. 293. Deadline for making reservations is January 24.



### RESERVATIONS

Name \_\_\_\_\_ Mr. \_\_\_\_\_  
 Branch \_\_\_\_\_ Mrs. \_\_\_\_\_  
 \_\_\_\_\_ Ext. \_\_\_\_\_  
 Double \_\_\_\_\_ Triple \_\_\_\_\_ \$ \_\_\_\_\_

Make checks payable to Ames Entertainment Committee and send to Jim Patterson, Electronic Instrument Branch. (Ext. 293)

Remember the date--February 16, 1962

## Want Ads

For sale-1953 Olds convertible, 5' Baby Grand piano, Norge washing machine, Norge electric dryer, heavy duty 8' work bench, and 6' redwood patio table and benches.

For sale-Deluxe Stauffer reducing table, like new, \$150. 1948 Jeep engine, complete, \$75. Call C. C. Jern - CY 2-2375.

For sale-1951 Hudson Hornet 4-door sedan. Recent overhaul, new seat covers, dependable transportation, \$200 firm. Call Bill Jibby - RE 9-3633.

For sale-Zenith 19" Portable TV, 1 month old cost \$176.75, selling for \$145.00 cash. Call Jim Gysan - DA 1-1399.

For sale-Roth violin, slightly used, excellent for students, \$55.00. Okeefe and Merritt stove with griddle well, clock timer, very good condition, \$50.00. Call AN 9-4577 after 6:00 p.m.

For sale-1956 Pontiac 4 door station wagon, \$800. Call Al Boissevain VL 1-1224.

For sale-1952 Chevrolet, 4-door sedan, 3 new tires, heater, Powerglide, good commute car. Call Ben Meyer - RE 9-8038.

Wanted - Good inexpensive piano by Mt. View Nursery School. Call CH 5-2889.

Wanted - To borrow a copy of the "Recorder Manual" published last summer or fall by Instruments and Control Systems. Call Doug Pearson ext. 426.

Wanted - Canopy for pick-up, cab height, 6'1/2" wide bed. Call Leo Morrow 245-1402.

Wanted - 1956 or 1957 Ford or Chevrolet. Call Darlyne Moen YO 7-1242.

Riders Wanted - Have stagecoach, will take passengers. Sunnyvale area, 8 to 4:30 shift. Call Carr - Ext. 262.

The **Astrogram** Room 111 Administration Building Phone 385

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## Eggers Recipient of Sylvanus Reed Award

Dr. Alfred J. Eggers, Jr., Chief of Vehicle Environment Division, was presented the Sylvanus Albert Reed Award at the recent IAS Honors Night Dinner in New York for his work in aerodynamics and atmosphere entry research. The Reed Award is conferred annually in memory of the former IAS member, an early pioneer in aeronautical sciences, in recognition of an individual's outstanding achievement in theoretical investigation in this field.

Since joining the Ames staff in 1944 Dr. Eggers has specialized in hypersonic and space research. His recent work in the field of hypersonic and spacecraft design has produced novel aircraft and lifting entry vehicle concepts which have practical applications. The fundamental aerodynamic principles on which the B-70 Mach 3 bomber is based were conceived by Dr. Eggers, and he has made basic contributions to hypersonic flow theory and to the understanding of spacecraft motion and heating.

(Continued on Page 4)

## Schnitker Named Mt. View "Citizen of the Year"



Edward H. Schnitker, Assistant Budget Officer, has been named Mountain View's "Citizen of the Year."

Schnitker was cited Saturday evening, January 27 at the Annual Award Dinner of the Mountain View Chamber of Commerce for his service to the community in Boy Scout work, the United Community Fund and school unification activities. The honor came as a complete surprise to Ed Schnitker, a non-member of the chamber. He had been asked to attend the dinner as a favor by Dr. DeFrance, who claimed to have other engagements that evening.

Schnitker is past chairman of the Mountain View District Committee of the Stanford Area Boy Scout Council, a past member of the executive board of the Scout council and institutional representative for Boy Scout Troop 43 in Mountain View. In 1957 he was awarded the silver Beaver Award, highest honor that can be bestowed on a man for his contribution to

the Scouting Movement.

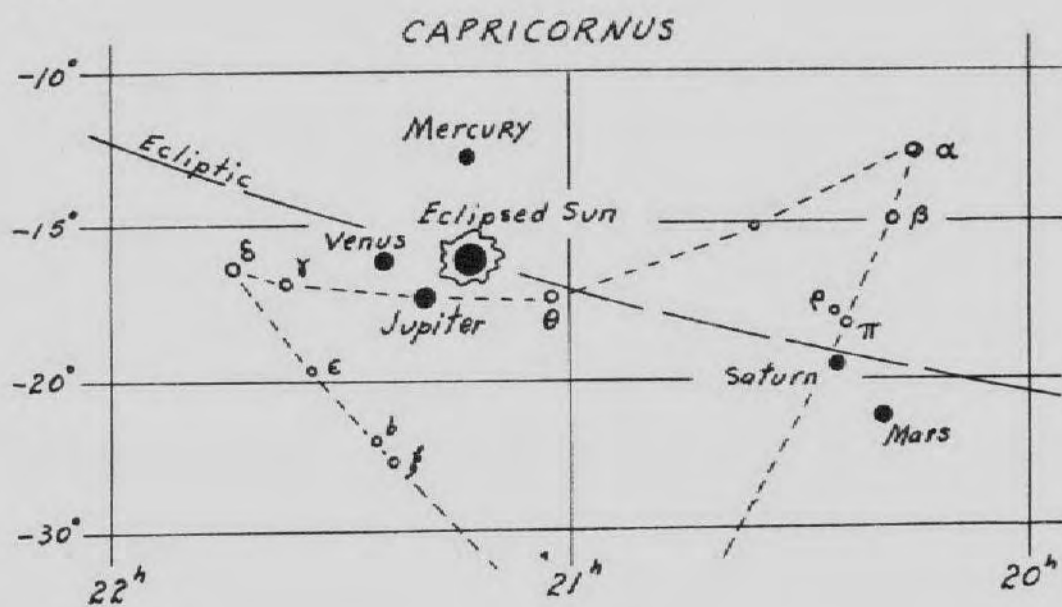
He is presently serving as a member of the committee studying unification of the Mountain View, Los Altos and Whisman Elementary school districts with Mountain View-Los Altos High School District. He was a Charter member of the group organized to start the United Crusade here, has been on the Board of Directors since the inception of this group, and served as President of the United Fund Drive in Mountain View in 1959.

The award was presented by Mountain View Mayor Charles M. (Mort) Moore at the chamber's 40th annual dinner at the Sunnyview Family Club, 266 Escuela Avenue, Mountain View.

Schnitker, his wife Elizabeth, and daughter Carol Ann make their home at 1169 Golden Way, Los Altos. Schnitker was born in Ohio and has been with NASA for 32 years. He has worked 22 years

(Continued on Page 4)





## Astroventuring...

★ with walt krumm

### KNOW THE SKY CLOSE PLANETARY GROUPINGS

On February 5, 1962, one of the rarest events of the heavens will take place. As seen from the Earth, five naked-eye planets and the new moon will be in the vicinity of the Sun. All seven "planets" of the ancients will appear together in the sky—Mercury, Venus, Mars, Jupiter, Saturn, and the Moon and Sun (for the ancients considered the later two to be planets also). The Angular distance between the most widely separated planets, Mars and Jupiter, will be only 16 degrees on this occasion.

Because close planetary groupings include the Sun, these are generally not observable. The phenomena of February 5th is a very special event in-as-much as it occurs at the time of a total solar eclipse. Observers in the path of totality will have a sky dark enough for the planets to be seen! In the years between 1007 and 2100 there will have been 14 of these close groupings of the planets but only ONE during a total eclipse - THIS YEAR. Also of the 14 close groupings, only in one other were the planets within 20 degrees of each other and the eclipse that year was only partial.

In February 1524 the seven "planets" were grouped together in the astrological "humid" constellations of Aquarius and Pisces and dire events were predicted. The coming event must have terrified the Astrologers, for a general flood was forecast; but in many

places February was the driest month of the year. Predictions by Astrologers that "The world is coming to an end" or "cataclysmic events will occur" often accompany these close planetary groupings. 1962 is no exception and you have doubtless read or heard these latest prophecies of doom and catastrophies.

Generally the event lasts a couple of days - the interval required for the moon to travel 30 degrees through the sky. However, it is theoretically possible for a 5-day event. The 1962 event will last 71 hours - from 5 hours U. T. February 3rd to 4 hours U. T. on the 5th. We on the west coast will be able to observe only the first part of the eclipse as the Sun will go below the horizon at sunset only half covered by the moon.

The accompanying sketch indicates the planetary positions for February 5th at eclipse time.

### NASA'S DIXON TO SPEAK IN SAN JOSE FEBRUARY 21

NASA Deputy Associate Administrator Thomas F. Dixon will be principal speaker at the annual "Engineers' Week" banquet to be held Wednesday evening, February 21 in the Santa Clara County Fairgrounds Exhibition Hall. Mr. Dixon will discuss recent developments in the Project Apollo Program. X-15 pilot Joe Walker will also be present to relate his practical experiences in conditions which resemble travel in space.

Co-sponsored by the Santa Clara Valley Engineers' Council and the Lockheed Management Association, the banquet is expected to be well attended by local engineers because of its "Lunar Mission" theme and the current interest in U.S. moon

## Ames Airings

.....by  
Sharon Scharmen

VIRGINIA HUGHES (Physics) made a trip recently to San Diego in order to witness the graduation of her son, Paige Ames Hughes, from boot camp at the Marine Corps Recruiting Depot. After his leave in February, he will be attending Sea School and is lined up for possible embassy duty. Virginia is extremely proud of him and his achievement. While she was in the Los Angeles area, she toured Disneyland and Hollywood with her 78-year-old mother, who enjoyed the whole trip immensely. ....NICK VOJVODICH (HT) became the proud father of a lovely baby girl on January 4. Kim Louise arrived weighing 8 lbs., 5 ounces, bringing joy to the Vojvodich household. ....A little jewel named Crystal arrived to brighten up the home of our editor BRAD WILSON on January 18. Crystal Joy weighed in at a dainty 6 lbs. and will be admired and protected by her two older brothers who think she is quite a phenomenon. ....FLASH! Anyone seeing a snowman wearing a skipper's cap should get in touch with BERNICE CHRISTENSEN (ISD). Her snowman was stolen from her front lawn Sunday, January 21 and she has been quite upset ever since.

### SNOW TRIP RESERVATIONS STILL AVAILABLE

Deadline for making reservations for the Ames Snow Trip has been extended to Friday, February 2. Join the 30 or more enthusiasts who have already purchased tickets for a gala weekend in the snow at Squaw Valley. The chartered Greyhound bus leaves Ames at 5:00 p.m. Friday, February 16, and will return Sunday afternoon, February 18. Cost per person is slightly less than \$30.00. Call James Patterson, ext. 293.

probes. Last year Dr. Werner Von Braun, Director of Marshall Space Flight Center was featured speaker at the event.

Tickets are priced at \$4.50 each and may be ordered from John Leveen, Employee Development Officer, ext. 412.



## James E. Webb Discusses NASA's Programs, Responsibilities

In a recent exclusive interview in Washington, D. C. with a representative of New York Radio Station WNEW, NASA Administrator James E. Webb included the following statements in his discussion of America's space program for the current decade.

**QUESTION:** How many additional Mercury flights are now in the planning stage?

**WEBB:** The Mercury Program basically has four manned orbital flights of 4½ hours each—that's 3 orbits around the earth. Then the machine will be enlarged with larger supplies of oxygen and other life-support equipment to make it capable of 18 orbits around the earth. Beyond that, we will adapt it for flights as long as a week that will include animals or other specimens and scientific experiments.

**QUESTION:** Would you compare the status of our Man In Space Program with that of the Soviet Union?

**WEBB:** Certainly, the large boosters that the Russians have given them a capability of putting larger spacecraft into orbit than we have. I wouldn't be surprised to see them make a multi-manned orbital flight before we can make it. I wouldn't be surprised if they should have a multi-manned ship fly past the moon before we do.

But we will be moving steadily in an area where the totality of our program yields the kind of information we need... and I'm sure that in terms of the total understanding, the technology, what one person called technological dexterity, is in our favor.

**QUESTION:** Please describe the status of the Project Mercury Mark II Program.

**WEBB:** We are now at work on this larger Mercury capsule. It will hold two men... will be so arranged that all the complex electronic and radio and life-support equipment will be on the sides... so that we can work on it even though it is mounted on top of the Titan missile. This will permit us to proceed with a good deal more assurance to make each flight on schedule—if one item goes bad, we can take it out like you would repair an aircraft engine. This is possible because the Titan has better lifting capability than the Atlas. The Mark II Mercury or Gemini space capsule will be twice as large in volume, perhaps twice as heavy as the Mercury, and will be equipped with ejection seats. It will be an experimental flying vehicle for use in space.

**QUESTION:** Now, Mr. Webb, let's go on to another stage—the first actual rendezvous missions in orbit. As I gather it, these are to be missions with Gemini spacecraft which the Agena rocket will send into orbit.

**WEBB:** The thing we expect to do is to have the Air Force launch an Atlas missile that has an Agena engine on top of it. Now when this Agena engine is in orbit around the earth, we will then launch the two-man Gemini, and bring them together in space so that the two-man spacecraft can be attached to the engine. Then the engine can give them power to maneuver in space so they can go up to a larger orbit, or even project themselves outward from the earth a good distance and return.

We'll do it with a much less expensive spacecraft and a much less expensive rocket than the giant rockets that we would have to have to launch to the moon... but we'll be learning the same kind of techniques on a similar scale.

**QUESTION:** Can you give us the story on the 3-man Apollo Project?

**WEBB:** First of all, with the Saturn C-1, which was launched at Cape Canaveral about three months ago we will be able to launch this first version of Apollo with three men in it into an orbit around the earth. Then we will build a larger Saturn, which will have 7½ million pounds of thrust. This will launch the Apollo outward so that it can fly around the moon and return to the earth.

Now, then, if we attach to the three-man Apollo spacecraft a propulsion unit and the life-support equipment for the landing on the moon, and if we use a second advanced Saturn to launch a very large engine just as we did with the Agena on the rendezvous, and join this Apollo with this very large propulsion unit; then you have a large enough spacecraft with enough power to go to the moon, land, take the scientific samples, measurements of the different phenomena on the moon that we need to know, take off, and come back to the earth.

**QUESTION:** Can you give us the projected target dates for some of these steps?

**WEBB:** Now I would think that first of all, the first orbital flights of the Apollo would probably take place about 1965. The fly-by of the moon might take place the following year. Then, somewhere between 67 and 70, you would have the manned lunar landing.

**QUESTION:** I'm assuming, as I think most people assume, that all of these adventures will be made by a lucky select few, the perfect physical specimens, the trained astronauts. Isn't there a chance that in our lifetime men like you and me will get to fly in space—might get to the moon?

**WEBB:** I think within the lifetime of a young person, he could go if there were a reason to go. But I think that the priority will be very heavily slanted to those who can do the work required.

**QUESTION:** How about a manned station on the moon? Do your plans encompass that?

**WEBB:** We don't have firm plans for maintaining a station on the moon. We first have to get there and find out what the situation is and how much value there is in having a station there. I believe it would certainly be possible in the 70's if it turned out to be needed.

**QUESTION:** Now, are we talking about two different locations for a manned station? One on the moon perhaps and one in space? Do you make a distinction?

**WEBB:** Yes, I do. I think that by about 1965 we'll have to reach a decision whether we want a more or less permanent orbiting station that would, say, accommodate fifteen men, in permanent orbit around the earth with the crews replaced by vehicles that would go up to the space station and return. I think we could build a more or less permanent space station some time in the 70's.

**QUESTION:** Mr. Webb, I've asked you about all the questions which have occurred to this essentially earth-bound layman. Perhaps there is something else you'd like to tell us, particularly on the eve of Colonel Glenn's historical flight.

**WEBB:** Yes, I think it is a tremendous tribute to the leadership of this nation on a bi-partisan basis that... we have been able to develop our space program in the short four years since Sputnik I to the point that we are able, openly with the TV cameras on us, to project a great American out into space... the world does believe that the nation that was first in space, the nation develops technology to be first in space and remain first in space, is really the nation that is going to stay ahead in all fields of technology.

This image, which has been adopted by the world as a measure of our advance, must be accepted by us and we must measure up to this image...

## Want Ads

For sale-1957 Chevrolet, 4 door sedan, 6 cylinder, heater, light green, standard transmission, 36,000 miles \$900. Call Elgato 6-1670.

For sale-Duncan Phyfe drop-leaf extension table with 4 extra leaves & custom-made pad all excellent condition plus 5 matching chairs. Best offer. Call AX 6-2844.

For sale-48" Roll-Away Bed, coil spring with innerspring mattress, hardly used. \$25.00. Call CH 5-1402.

For sale-Navy Officers' top coat, size 42, nearly new. \$30. Call AX 6-5689 after 5:15 p.m.

For sale-Electronic tube "toter", all metal, capacity approximately 140 tubes. \$10.00. Call 948-6378.

For sale-Chimes for any electronic organ. Perfect for home or church. Will install. Cost \$425.00 will take \$275.00. Call YO 8-1200.

For sale-16' house trailer, sleeps 4. Butane, electric brakes. \$325.00. Call K. Wilton DA 2-3231.

For sale-1953 Olds convertible, 5' baby grand piano, Norge washing machine, Norge electric dryer. Call Sommer DA 5-3018.

Wanted-To join or form ride group from Prospect Road area, 7:30 to 4:00 shift - Call AL 3-6773.

Wanted-To join ride group, Country Lane area of Sunnyvale, vicinity of Fremont Road and Highway 9, 7:30 to 4:00 shift. Call RE 6-5393.

For sale-Voice of Music table model Hi Fi Set. Excellent condition, diamond needle. \$65.00. Call Norma Haskew DA 4-3839.

## BOWLING

.....by  
Dee Carr

With only three nights of bowling left in the second round of the All-Ames League, SSFF has a comfortable lead of 5 games over second place Electrical. SSFF is to be congratulated on their extremely fine bowling, having lost only 5 games out of 32. Team standings as of January 25:

	Won	Lost
SSFF	27	5
Electrical	22	7
Afterburners	18	14
Pinbusters	17	15
HBR	17	15
Shwiki	16½	15½
Orbinauts	16	16
Machine Shop	14½	17½
Mavericks	13	19
Striking Dynamos	13	19
EMC	10	22
Bahude	8	24

High games were rolled by Harold Lagergren (EMC), 212, Jerry Havill (Orbinauts), 205, and Charles DeRose (Bahude), 202.



## Gilruth Receives Top IAS Award

Robert R. Gilruth, Director of NASA's Manned Spacecraft Center received the Institute of Aerospace Sciences; coveted Louis W. Hill Space Transportation Award for his "outstanding leadership in Technical development of spacecraft for manned space flight" at the Institute's 30th Annual Honors Night Dinner on January 23 in New York City.

Mr. Gilruth was honored by the IAS for his achievements in direct ing the planning, research and development of manned satellite programs, notably Project Mercury and Project Apollo.

The Louis W. Hill Award, which is presented annually by the IAS, was established by the Louis W. and Maude Hill Family Foundation to serve "the best interests of humanity" when "encouragement and recognition" are given to "significant contributions indicative of American enterprise and ingenuity in the art and science of space flight." The Award carries an honorarium of \$5,000.

A noted authority on aircraft handling qualities and flight research techniques, Mr. Gilruth developed the original methods for obtaining aerodynamics research data at transonic speeds. He played a leading role in the transition of NACA to NASA.

A native of Minnesota, Mr. Gilruth holds an MS in Aeronautical Sciences from the University of Minnesota and has also received the Sylvanus Albert Reed Award of the IAS, 1950; the Federal Government's Superior Accomplishment Award, 1951; and the Outstanding Achievement Award of the University of Minnesota, 1954.

### EGGERS...

(Continued from Page 1)

ing during atmosphere entry. He has also conceived and developed specialized research equipment, including the Ames Atmosphere Entry Simulator and hypersonic wind tunnels.

Dr. Eggers is a member of the Scientific Advisory Board of the U. S. Air Force. He is a Fellow of the IAS and the American Rocket Society, and a former National Director of the American Rocket Society. He is a member of Sigma Xi and Tau Beta Pi, The American Association for the Advancement

## Velvin Watsons Honored by Sunset Magazine



Cassandra Watson, wife of Velvin R. Watson, Heat Transfer Branch, walked through the massive doors of the Lane Publishing Company of Menlo Park last month and became the 400,000th visitor to the picturesque home of Sunset Magazine and Sunset books. The surprised and elated Mrs. Watson was greeted with a ceremony which included gifts of flowers, books and of personal congratulations from Sunset Magazine's President L. W. Lane, Jr., and Publisher Bill Lane. She was accompanied by her husband, their two children, Melanie, 2, and infant son, Mark, and Mr. Watson's mother, Mrs. J. R. Watson of San Jose.

The Watson family brought to 400,004 the number of visitors who have walked through the double hand-carved, 10-foot-high entrance doors since the impressive headquarters for Sunset Magazine was completed and opened to the public in 1951 on a seven-acre landscaped site at Middlefield and Willow Roads.

During the ceremonies which

marked their arrival, Mrs. Watson was presented an armful bouquet of "Aristocrat" roses, and her choice of any 10 books from the 73 titles currently being published by Lane Book Company. The Watsons' visit was prompted by the fact that they are long-time readers of Sunset Magazine, and wished to take advantage of the "open house" policy of the publishing company to view the handsome adobe and redwood structure and its acres of elaborate plantings and landscaping.

A native of Illinois and Graduate of the University of California at Berkeley, Velvin Watson has been a member of the Ames staff since February, 1960. The Watsons make their home at 7095 Phyllis Avenue, San Jose.

### SCHNITKER...

(Continued from Page 1)

at Ames.

He holds two Bachelor of Science degrees, one from the University of Toledo in mathematics and one from Purdue University in civil engineering.

The **Astrogram** Room 111  
Administration Building  
Phone 385

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Reporters....NASA Employees

Deadline for contributions:  
Thursday between publication dates.

of Science and The American Ordnance Association. He is the holder of the Arthur S. Fleming Award for 1956, given annually to the ten most outstanding young men in the Federal Government. In 1957 he received the TOYM Award of the United States Junior Chamber of Commerce, a recognition extended each year to the ten most outstanding young men in the United States.



## NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

# The

# Astrogram

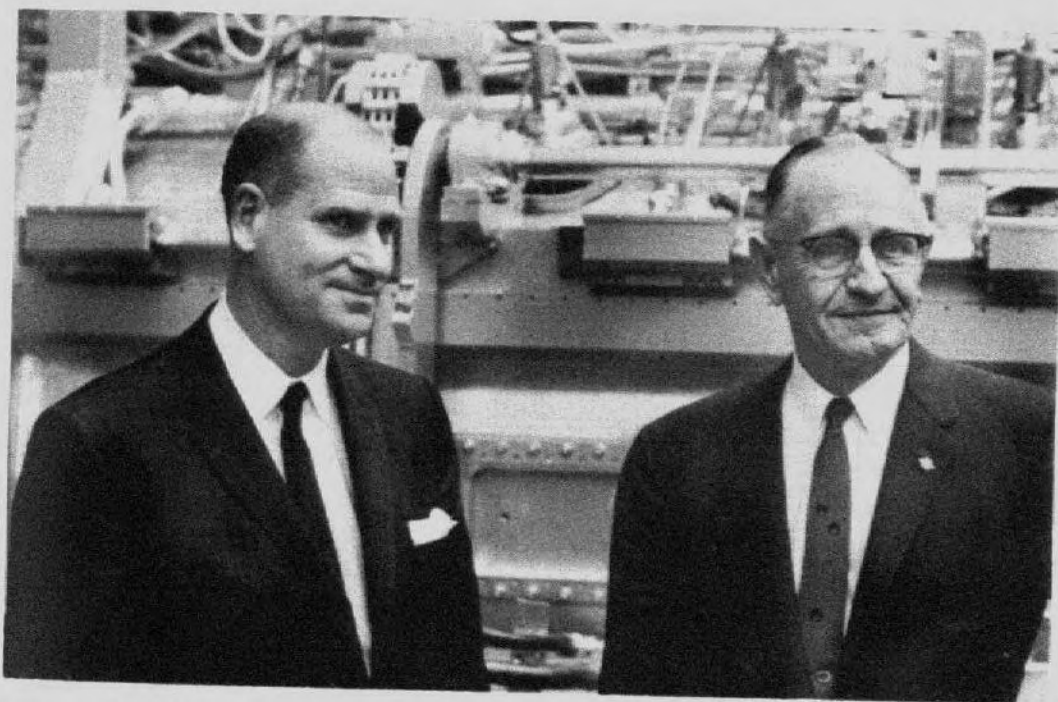
### AMES RESEARCH CENTER, MOFFETT FIELD, CALIFORNIA

VOLUME IV

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NUMBER 9

## Top NASA, Air Force Speakers Featured at IAS Symposium



Thomas F. Dixon, NASA Deputy Associate Administrator (left), is shown above with Dr. Smith J. DeFrance, Ames Director.

Leaders of NASA and Air Force space programs will be featured speakers at a three-day meeting in San Francisco of the Institute of Aerospace Sciences. They are Thomas F. Dixon, Deputy Associate Administrator of NASA and Brig. Gen. Harvard W. Powell, Assistant Deputy Commander for Aerospace Systems, Air Force Systems Command.

The meeting is the National Tracking and Command of Aerospace Vehicles Symposium, to be held February 19-21 at the Jack Tar Hotel. It is sponsored by the San Francisco Section of the IAS.

Mr. Dixon will speak at the luncheon meeting Tuesday, February 20, and will be introduced by Dr. Smith J. DeFrance, Ames Director and Toastmaster for the occasion. Mr. Dixon came to NASA in September, 1961 from North American Aviation Corporation, where he held the post of Vice President of Research and Engi-

neering of NAA's Rocketdyne Division. The Atlas, Thor, Jupiter and Redstone missiles were designed and developed under his direction. He had been with North American since January, 1946.

A Navy Rocket Ordnance Specialist during World War II, he was honorably discharged as Lt. Commander. Part of his war service included study at the California Institute of Technology, where he obtained an MS degree in Aeronautical Engineering in 1945. He also holds BS and MS degrees from the University of Michigan and a Bachelor of Engineering Degree from Vanderbilt University.

Mr. Dixon was the 1961 co-recipient of the Louis W. Hill Space Transportation Award for his outstanding contributions to the liquid rocket. In 1957 similar recognition came through the Robert H. Goddard Memorial Award from the American Rocket

## Soule Retires After 34-Year NASA Career

Hartley A. Soule, internationally-known aerospace scientist, has announced that he will retire Friday, February 16, as Assistant Director of the Langley Research Center of the NASA.

Soule has served more than 34 years with the United States Government, all of it at the NASA Langley Research Center as a scientist concerned with broad fields of endeavor in aeronautical and space research.

His most recent major activity was as NASA Project Director for establishment by the Langley Research Center of the multi-million-dollar Project Mercury world-wide tracking and ground instrumentation system. This network is required to direct, monitor and provide contact with the nation's astronauts during orbital flight.

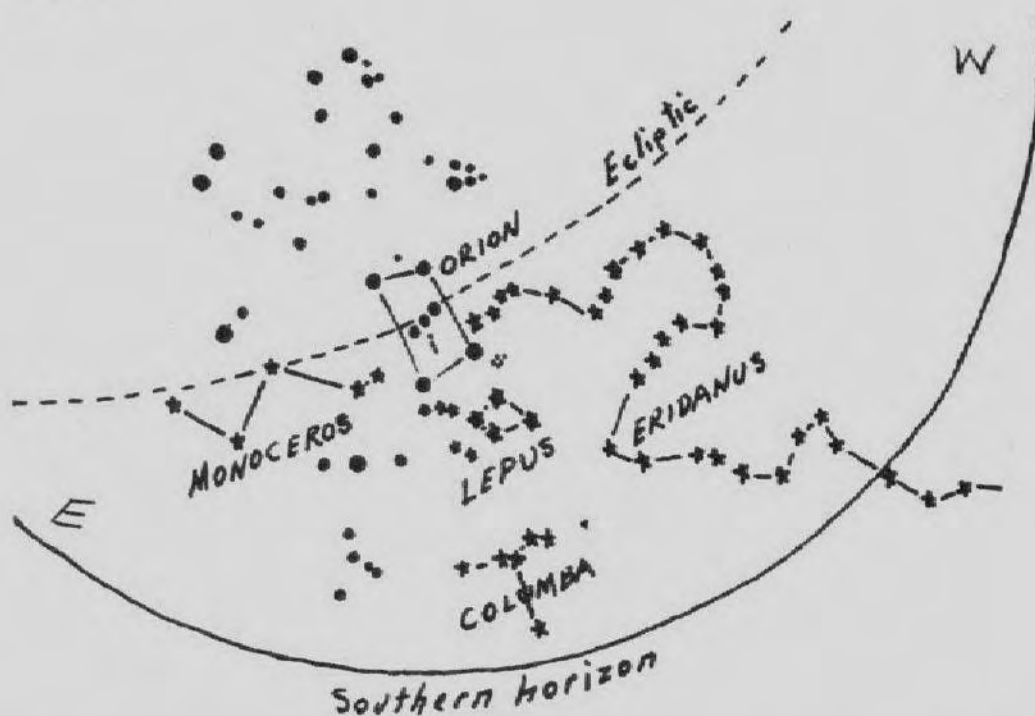
Earlier in his career--during the mid-1940's--Soule was instrumental in establishing what is now the NASA Flight Research Center at Edwards, California, where he formed a research group to conduct flight investigations into the transonic and supersonic speed regions through use of the X-1, D-588, and other research airplanes.

In expressing regret at Soule's retirement, Floyd L. Thompson, Langley Director, praised him for his outstanding record of accomplishment. Thompson, an associate of Soule's for more than three decades, cited him for his leadership in the conduct of several important pioneering programs which have contributed greatly to the advancement of flight in the United States.

Society. He is a member of the Society of Automotive Engineers and the American Rocket Society. He was named a fellow of the ARS

(Continued on Page 4)





## Astroventuring...

★ with walt krumm

### KNOW THE SKY

#### NEIGHBORS TO ORION

There are several of the lesser known constellations near and around Orion that we should learn.

ERIDANUS-or the River Po runs west from Orion, turns south, then southeast to below the horizon for our latitude. It takes a star map and the tracing from star to star to follow the River, for the stars are faint. Beta Eridani is easily found right next to Rigel in Orion. At the other end of the River we find the famous bright star Achernar (providing we are observing in San Diego or farther south).

LEPUS-the Hare-lies just south of Orion, crouching under his feet. Four fairly bright stars form an irregular but conspicuous quadrilateral to mark the constellation for our detection. A few degrees south of Rigel are four faint stars that mark the ears of the Hare and below Saiph is found the curved line of three stars that are in the back of the animal.

The Hare was placed in the sky to represent a creature which Orion especially enjoyed hunting. There is an astonishing amount of folk lore connecting the Moon with the Hare.

Below Lepus we can see the fine group of stars that form the constellation of COLUMBA-the Dove. Phaet, or Alpha Columbae is situated in the heart of the Dove. Phaet, or Alpha Columbae is situated in the heart of the Dove.

Lying almost entirely within

"the Winter Triangle" (Betelgeuze, Sirius and Procyon) we find the constellation of MONOCEROS - the Unicorn. This, too, is a constellation of faint stars that portrays a creature resembling a horse with a long single horn projecting from its head. Legend says that when pursued the animal leaps from great heights and lands upon its horn, breaking the fall. In the "good-old" pharmacopeia, powdered Unicorn horn was one of the most exotic prescriptions. All you had to do was find one! The Constellation is not quite as elusive.

Taurus, Auriga and Gemini lie to the north of Orion, but we talked about these last year.

#### TICKETS STILL AVAILABLE FOR ENGINEERS WEEK BANQUET

A small number of tickets are still available for the "Engineers Week" banquet to be held Wednesday evening, February 21 in the Santa Clara County Fairgrounds Exhibition Hall.

Featured speakers at the event will be Thomas F. Dixon, NASA Deputy Associate Administrator and X-15 test pilot Joe Walker. Dixon will discuss recent developments in the Project Apollo program, and Walker will relate his practical experiences in conditions which resemble space. Walker will be introduced at the banquet by Dr. Smith J. DeFrance, Ames Director.

Tickets are priced at \$4.50 each, and may be ordered by contacting John Leveen, Training Officer, at ext. 412.

## Ames Airings

.....by  
Sharon Scharmen

Cupid has been hard at work in the Personnel Division of late conjuring up a romance between DEE CARR (Class.) and RALPH MAINES (Security). Ralph, a long-time bachelor, made Dee his wife on February 2 in Mt. View. The newlyweds are residing in Palo Alto at present. We offer our hearty congratulations and wish them many, many years of happiness..... The staff at the 40- by 80- was completely surprised a couple of weeks ago when GEORGE AOYAGI came strutting in with a box of candy and cigars to announce that he was a new father. He really kept it a secret until the day his son, Douglas was born, on January 29, weighing 6 lbs, 13 1/2 ounces..... A surprise baby shower was given for ORSA HADGES (Train. & Trans.) at the home of Betty Thomsen at 8:00 p.m. on January 19. About 15 people attended and had a wonderful time watching Orsa open all the lovely gifts for her heir-to-be. Orsa will be missed by the Personnel staff, but we wish her the best of everything. (And Orsa-be sure to get the right-sized diaper for that new baby)..... Wedding bells rang out for RICHARD HAMP (AFS) and Kay Robinson on January 6th. After a lovely ceremony, they left for a happy Hawaiian honeymoon. The bride and groom are presently residing in San Jose. Dick has been with Ames for about five years, and we understand he is the proud owner of a genuine 1931 Model A Ford pickup. Kay works for Santa Clara County as a clerical supervisor in the Aid to Needy Children Department.





## Sommer Transfers to NASA Headquarters



Simon C. Sommer, Supersonic Free Flight Branch, has relinquished his position as aeronautical research engineer at Ames to accept a permanent assignment at NASA Headquarters, Washington, D.C. in the office of William A. Fleming, Director of Technical Programs. His duties will be in the field of project planning and screening.

His work at Ames has been primarily in the areas of atmospheric heating, aerodynamic stability and control and boundary layer research. He is the author of a number of research papers and reports, and was engaged in the preliminary stability research on the Project Mercury capsule.

Sy, whose last day of work at Ames is Friday, February 16, came to this Center in July, 1949, as a recent graduate of the University of Illinois. While at the University he was engaged in research on supersonic propeller configurations. Prior to his academic training he served on active duty with the U. S. Naval Reserve as an Aviation Propeller Specialist. He is a native of New York City.

Friends and co-workers of Sy are invited to attend a cocktail party in his honor Friday afternoon, February 16 at the Moffett Field Officers Club from 4:30 to 6:30 p.m. A luncheon in his honor was held earlier this week by members of the SSFF Branch and his immediate associates.

## Heat Transfer Climbers Spend Weekend in Cool Yosemite

Two mountaineers from Heat Transfer Branch braved cold, snow and the threat of avalanches on an overnight hike in Yosemite National Park recently.

Marvin Kussoy and Charles Duller (in photo above) left Friday afternoon, January 26 for Yosemite loaded down with 35-pound packs, snowshoes, and cold weather clothes. They spent the night at Camp IV, a tourist campground in Yosemite Valley. Saturday morning they started from Mirror Lake and climbed the north wall of the canyon on the Tenaya Lake trail. The sky was clear, with temperatures in the mid-fifties. There was about 20 inches of snow on the upper end of the trail, and climbing was accomplished only with the aid of snowshoes.

Marv and Charlie set up their overnight camp near Snow Creek at an elevation of 7,600 feet between the summits of Mount Watkins and Indian Rock. As night fell, so did the temperature--down to a cool 15 degrees with a moderate wind. Marv did the cooking on the trip and proved to be a good chef. His entrees included hot cocoa, bacon and eggs surprise (no eggs), hash, and mashed potatoes.

The two intrepid adventurers spent an uneventful night, and awoke to clear skies and brisk winds Sunday morning. Their boots were frozen stiff, as well as the shutter on Charlie's camera.

The trip ended Sunday afternoon with the descent to the valley floor. Going down took only two hours in contrast to six hours for the trip up.

### TICKETS AVAILABLE FOR GIANTS-BRAVES OPENER APRIL 10

Ames employees will be able to attend the San Francisco Giants home games again this year on a reserved seat-round trip transportation basis, according to James Patterson, EIB.

Starting with the season opener with the Milwaukee Braves April 10, groups of 33 or more employees may take advantage of this opportunity to see the games without parking or seating worries. A Greyhound bus picks up the group at Ames, unloads at the gate of

## LIKE TO COLLECT STAMPS? HELP FORM AMES PHILATELIC CLUB

Now is the time for all good philatelists to come to the aid of other stamp collectors at Ames and help form a Stamp Club. Purpose of the club would be to meet, swap stamps, exhibit collections, and exchange information and ideas, such as how to detect counterfeits and bogus issuances.



Incidentally, persons knowing the whereabouts of the perpetrator of the commemorative shown above should contact him immediately and express their opinion of the proposition. Others should call Bob George, ext. 224 and let him know where they stand (or sit) on this subject.

### SPECIAL RATES FOR "EL CID" AVAILABLE THROUGH AEC

The Ames Entertainment Committee has made special arrangements for Ames employees and their families to view the motion picture "El Cid" Sunday evening, March 25, at the Alexandria Theater, 5400 Geary Blvd., San Francisco at the reduced rates of \$2.35 for loges and \$1.90 for orchestra seats.

Representing a cost of more than \$10,000,000, "El Cid" is in all respects the ideal motion picture; pictorially striking in color, sweep and grandeur; authentic in content; dignified and wholesome in character and dialog; adventurous, romantic and exciting in spirit; and, above all, admirably suited for all members of the family.

Employees interested in taking advantage of this offer should complete one of the order blanks available in each branch, attach to it a check or money order for the full amount made out to the Ames Entertainment Committee, and send it to Hy Zimmer before March 12.

Candlestick Park, and returns the party to Ames after the game.

Price per person for each trip will be \$4.50. Employees interested in reserving seats for the opening game are invited to contact Patterson, ext. 293 immediately.



## Tony Quartuccio Displays His Work at One-Man Show

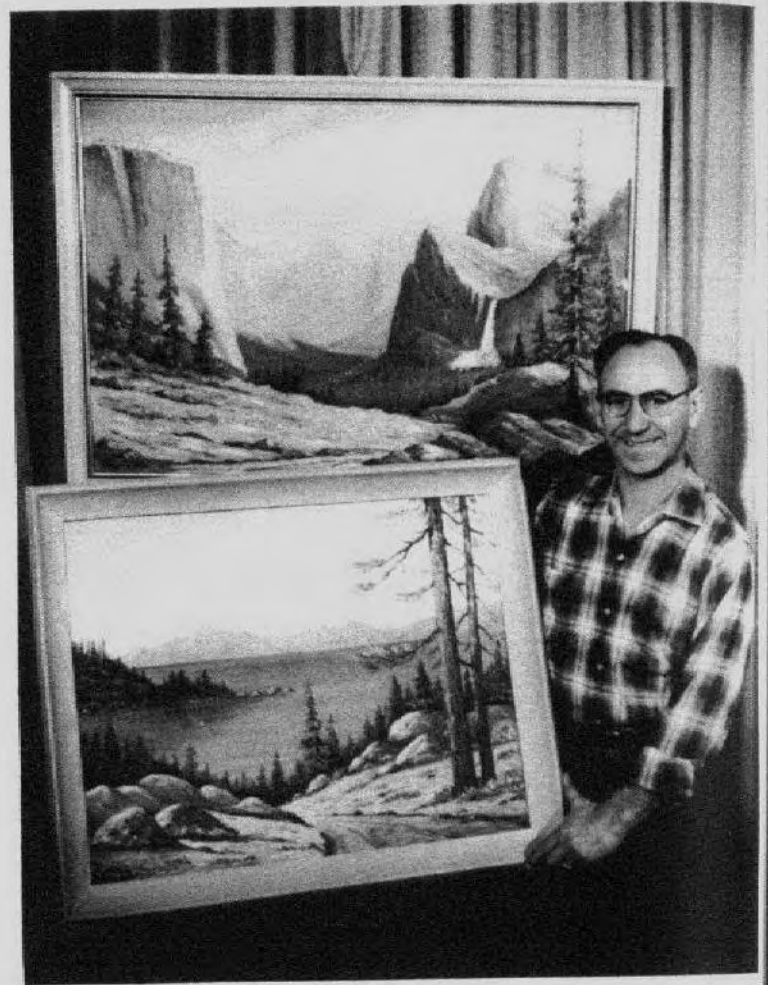
Anthony Quartuccio (Transportation) will be featured artist at a one-man art show sponsored by the San Jose Art League February 13 through March 12 at the investment firm of William R. Staats & Company, Town and Country Shopping Center, San Jose.

The show will include landscapes of Monterey, Yosemite and Lake Tahoe and a seascape of the Golden Gate at sunset.

Tony, who has had only nine months of formal art training in his life, has been making drawings, sketches, water colors and oils as long as he can remember. He works from snapshots, sketches and memory, often creating a whole landscape to suit himself. His favorite subjects are outdoor scenes, many ideas for which have come from the locality of the family cabin at Lake Tahoe.

His painting had always been merely a hobby, he states, until the past two years when the demand for his work has exceeded the supply. Family, friends and co-workers are eager to have Tony paint them a picture for the den or over the fireplace. Using what spare time he can find, it often takes him a month or more to complete a painting similar in size to those pictured.

His modest charge for the beautiful work he produces is far below the price he could demand. Understandably, his business-conscious friends are attempting to persuade him to place a much higher value on his art. But Tony, regardless of the commercial value involved, will probably continue to ask just enough to cover the cost of paints and materials and a few dollars for his time and talent.



### IAS SPEAKERS... (Continued from Page 1)

in 1960, and has served as President of the Society's Southern California Section.

General Powell will be principal speaker at the Tuesday banquet. His office supervises all ballistic systems and space systems activities of the Air Force. An Air Force pilot since 1940, General Powell received the Distinguished Flying Cross and other awards during World War II, and has held numerous assignments in the Air Force since the war. He assumed his present duties in April, 1961. While in service he received his BS and LLB degrees from the University of Minnesota.

Registration for the IAS Symposium is Sunday night, February 18.

### SECURITY OFFICE ISSUES NEW IDENTIFICATION CARDS

New NASA Identification Cards are being issued by the Security Office. If you have not received yours as yet, it may be picked up in Room 114, Administration Building, in exchange for your old card.

## Want Ads

For sale: 1961 Tempest Pontiac, 2 door sedan, light blue, automatic transmission, bucket seats, radio & heater, 11,000 miles, \$1800. Call ALpine 2-5991.

For sale: Solid hardwood baby crib, including mattress, excellent condition \$35, high chair, \$15, play pen \$10. Call Dave Wald CH 8-4939.

For sale: 1950 3/4 ton Studebaker pick-up good tires and engine, \$200. Call RE 6-5894 after 4:30 p.m.

For sale: 1951 Cadillac, model 62, 4 door pale blue sedan, good motor, heater, dual radio, \$145. Call DA 2-8571

For sale: AM-FM tuner, 20 watt amplifier, university speaker, Webcor record changer, \$52.50. Call CH 8-1060 after 6 p.m.

For rent: Studio Apartment, Winfield Apartments, 1854 West Bayshore, East Palo Alto. One room with studio couch for bed, kitchen with electric stove and garbage disposal, swimming pool, \$98.50 per month. Call Mrs. Latalien, Manager, DA 1-8168.

Ride wanted: From Stevens Creek and Orange Road area. Call Beverly Blanchard 253-6467 or ext. 335.

### CREDIT UNION ANNOUNCES RESULTS OF ANNUAL ELECTION OF OFFICERS

The Moffett Field Employees Credit Union announces the following results of the annual election of board and committee members held January 30:

Board members include Lt. Col. Gerald S. Brownell, President; Fred Croshaw, Vice President; Ray Meyers, Treasurer; Dorothy E. Curran, Secretary; Donald Lloyd, Gabriel Fox and Chief Jack G. Shaw. Lt. D. Randall, USAF is an alternate Board member.

Supervisory Committee members include Glen Baker, Chairman, Gladys Gorkow and Ralph Maines.

Credit Committee members are Rena Estes, Chairman; Betty Thomsen, Secretary; and Stephen Bieda.

The Credit Union has in excess of \$20,000 available for loans to members only. Applications for loans are being accepted now in Bldg. 18, Navy side. It is hoped that new members may be accepted by July 1. Office hours are 11:30 a.m. to 2:30 p.m. Monday, Wednesday and Friday.

### The Astrogram

Room 111  
Administration Building  
Phone 385

The Astrogram is an official publication of the Ames Research Center, NASA, Moffett Field, California, and is published bi-weekly in the interest of Ames employees.

Edited by....Brad Wilson and Don Schilling.  
Reporters....NASA Employees

Deadline for contributions:  
Thursday between publication dates.



# The Astrogram

AMES RESEARCH CENTER, MOFFETT FIELD, CALIFORNIA

VOLUME IV

MARCH 1, 1962

NUMBER 10

## Ames Apollo Capsule Display Hit of Engineers Week Banquet



Pictured beside the Apollo Capsule mockup which was on display at the recent Engineers Week Banquet in San Jose are, left to right; Thomas F. Dixon, NASA Deputy Associate Administrator; NASA Test Pilot Joe Walker; Ames Director Dr. Smith J. DeFrance, and Milton B. Ames, NASA Director of Space Vehicles. Walker was introduced by Dr. DeFrance at the banquet.

Taking all honors at the recent Engineers Week Banquet at the Santa Clara County Fairgrounds was the NASA Apollo Capsule display constructed at Ames Research Center. A wooden mockup of the three-man orbital capsule scheduled to be launched by the U.S. in 1967, it is complete with three seats, a bed, three windows and a detailed control panel. It stands 16 feet high and measures 12 feet across.

Overall responsibility for the mockup was given to Brent Y. Creer, Assistant Chief of Human Systems Engineering Branch. Glenn Stinnet and Richard Gallant of Operations Branch and Gordon Hardy of Flight and Systems Sim-

ulation Branch were in charge of the engineering aspects of the project, assisted by Ralph Schlaegel and Nick Rock of the Model Shop. Responsible for setting up the display in the Fairgrounds Exhibition Hall were Harry DeVoto, Illustration, Leland Goularte and Harry DeAngelo of Structural Fabrication Branch, and William Rogers and Ralph Malloy of Transportation Branch.

Principal speakers at the banquet were Thomas F. Dixon, NASA Deputy Associate Administrator, under whose direction the Project Apollo program is proceeding, and NASA Test Pilot Joe Walker, who has set world speed records

(Continued on Page 2)

## Ames Experiment Aboard OSO Satellite

If NASA's Orbiting Solar Observatory (OSO) proves to be a success, man will get a new, undistorted look at the sun. First of the large "second generation" satellites, OSO contains 13 scientific experiments including a solar heating experiment suggested by Glen Goodwin, Chief of Heat Transfer Branch.

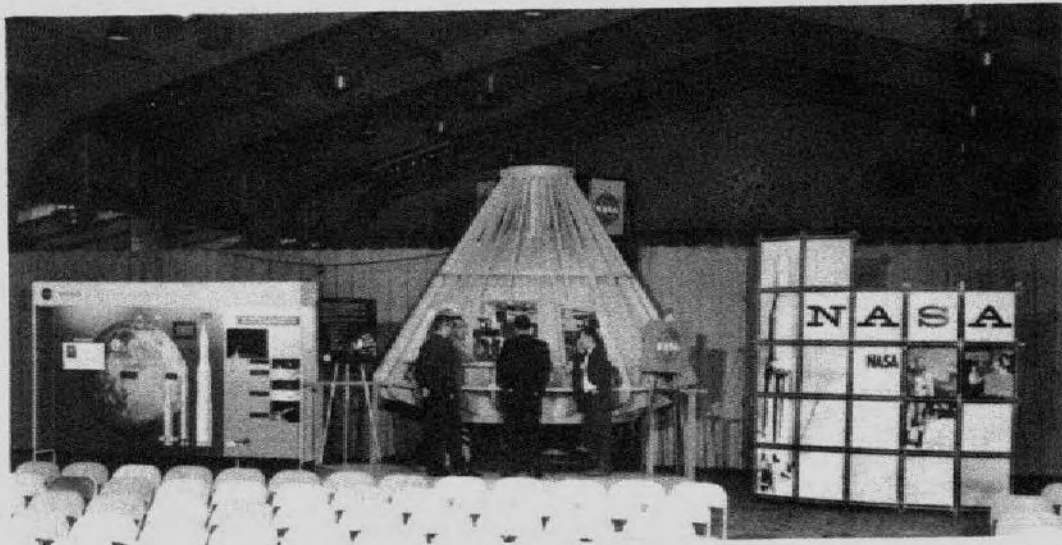
The 440-pound OSO spacecraft has two sections, an octagonal lower wheel on which is mounted a fixed section. Each contains experiments. OSO and succeeding solar observatory satellites are regarded by many in the scientific community as the most promising instrumentation advance in the study of the sun since development of the coronagraph 30 years ago. NASA hopes to use such spacecraft for at least the next 11 years (a full sunspot cycle) in order to study solar activity. Maximum useful lifetime of the S-16 OSO is estimated to be six months.

Experiments aboard the spacecraft include an x-ray spectrometer instrument designed by Goddard to lead to a theory for predicting when the sun is likely to flare up and unleash deadly protons. Knowledge of "safe" flight periods is essential to successful manned space exploration. Also aboard are the University of Rochester experiment to measure Gamma rays above 100 mev.; Goddard's instrument to measure the energy of interplanetary dust particles; the University of California's neutron, proton and electron detectors; and the Ames experiment to measure temperature changes of a surface exposed to space conditions.

During flight through space, spacecraft must rely entirely

(Continued on Page 4)





The overall shape and size of the Apollo Capsule are apparent in this view of the NASA display. Three men will orbit the Earth in a capsule similar to this one some time in 1967, according to the present launching schedule.

## NASA Announces Re-entry Research Program FIRE

The NASA has announced plans for a high speed reentry heat research program called Project FIRE. Purpose of Project FIRE is to obtain data on materials, heating rates and radio signal attenuation on spacecraft reentering the atmosphere at speeds of about 24,500 miles per hour.

Information from the program will provide the future technology required for protecting manned and unmanned spacecraft from blazing destruction upon reentry from lunar missions. This environment cannot be duplicated in any known ground facilities.

Project FIRE calls for sending instrumented spacecraft on ballistic flights downrange from Cape Canaveral, Florida. During flight and reentry information will be obtained by telemetry, radar and optical tracking systems. Recovery of the spacecraft will not be attempted.

An Atlas D booster will launch the reentry spacecraft weighing approximately 200 pounds and a velocity package which contains guidance components and the Antares solid-fuel rocket motor (third stage of the Scout vehicle). After the Atlas boosts the payload to peak altitude the velocity package provides the additional speed and spacecraft orientation in its descending flight.

During the next two years NASA plans to launch two Project FIRE

APOLLO...  
(Continued from Page 1)

in the X-15. Approximately 1,400 engineers and their friends were present at the exhibition.

## Ames Airings

.....by  
Sharon Scharmen

Cupid scored another hit just before Valentine's Day when JACK STEPHENSON (SSFF) and JULIE TAAFFE (EMC) eloped into the marriage-go-round. They tied the knot in Los Altos on February 10. It was reported that EMC was in a state of shock for one whole day. We wish them lots of happy years.

\*\*\*\*\*

GORDON PATNUDE (EMC) will be able to remember the day Gregory Philip arrived into this world because he was born on George Washington's birthday. This is the first Patnude heir, and he arrived weighing 7 lbs., 12 ounces.

\*\*\*\*\*

FRED DEMELE (12') is another proud papa as of February 19 when Michael Paul made his debut weighing a husky 9 lbs., 2 ounces.

spacecraft, each of which will carry different instrumentation systems.

## Recreation Roundup

.....by Vicki Malatesta

### AEC SQUAW VALLEY SAFARI A SUCCESS

After 13 straight days of snow and cold the sun and the Ames Ski and Snow Bunnies made a joint arrival at Squaw Valley for what turned out to be an exceptionally fine weekend for both novice and veteran skiers.

Looking very good on the slopes were Donna DeVoto (MZB), daughter of Harry DeVoto, Illustration, and John Wolfe (Physics) and Dick Ferguson (Fiscal). Looking very good both on and off the slopes were Joann Jackson (Library) and Carolyn Rizio (Procurement). Looking for his roommates early Sunday morning was Clarke White (SSFF), who overslept a bit and was late getting out on the slopes.

Age is certainly no handicap in this sport, for the ski classes were attended by 18-year-olds as well as more mature learners. One of the most active couples were the Larry Clousings (FSSR). They not only attended the ski class but later in the evening were doing the Bunny Hop to the music of the 12-piece orchestra in the Village Recreation Hall. Next day found them ice skating and teaching some of the neophytes a few tricks. The Otto Anholts (Mach) were also on the go most of the time.

Sunday morning brought a slight snowfall, but a number of outdoors types including Helen Davies (Pers), Elaine Munoz (MZB) and Evelyn Harper (Procurement) ignored the waiting bus and walked to the distant church under their own steam.

Julie Beasley (Env Biol) and her sister took some time out from giving "Twist" lessons to get out in the snow, too. On the other hand, Howard Savage and Matt Hahne (Physics) and Fred Shigemoto (Guid & Cont) were seen inside only for meals and hot coffee.

The Chartered bus left at 4 p.m. Sunday afternoon and stopped in Sacramento for a real Bavarian dinner and a fitting climax to an exhilarating weekend. Many thanks to Jim Patterson (EIB) for his efforts in organizing the trip. Arrangements have already been made to reserve the weekend of February 22, 1963, for another Ames outing in the snow!



## SAFETY NEWSLETTER

Something new in town--self service coin operated dry cleaning machines!

Deciding to use the service, a housewife gathered up some of the family's winter clothes and drove to a local establishment. After using the dry cleaning unit, she tossed the freshly cleaned garments to the seat of her car and started for home.

There was rather strong odor of the residual cleaning fluid, but it was not especially unpleasant and, anyhow, she would be home soon and hang up the things to air. The day was chilly the car windows were closed and the heater was on. In a few minutes the woman was overcome by the insidious vapor. Her car crashed into an oncoming car. She was badly injured and the driver of the other car was killed.

The cleaning fluid was perchlorethylene, a common industrial chlorinated hydrocarbon, nonflammable and of a rather low toxicity, but it is an anesthetic. It is used widely and safely in commercial dry cleaning plants and in other industries where its hazards are known and properly controlled.

Its introduction to the public through coin operated machines has created a new circumstance that necessitates adequate precautions. In this case someone did not give the essential warnings and did not apply the necessary precautions.

Flammable polyethylene wastebaskets are reportedly being found in hospitals, offices and homes. These will burn if a fire starts in the basket's contents. Water poured on such a fire makes it spread rather than extinguishing it.

Now on the market, however, are nonflammable plastic wastebaskets marked "non-combustible." Be on the lookout for this statement when purchasing a plastic basket.

Page 3

## GOLF

..... by  
Ruth Richardson

The Ames Golf Club held its first tournament of the 1962 season last Saturday at the Fairway Glen Golf Club. Play for the day was a best ball twosome.

In the first flight winning first place were Ted Plum and Bob Ny-smith. Tied for second and third places were Al Petretti-John Rak-ich and Frank Lazzeroni-Jim Mon-fort. Fourth place went to Jim Ne-lan and Ruben De Los Santos.

In the second flight Tom Har-mount and Bill Warren were first place winners. Another tie for second and third places went to the teams of John Van Etten-Harold Clements and Russell Fahey-Harry Stefani. Fourth place went to Harry DeVoto and Phil Johnston.

In the blind bogie event Genevieve Saunders was the winner of a prize donated by the Fairway Glen Club.

Next tournament is scheduled for March 17 at Hillview Golf Course, San Jose.

## Want Ads

For sale - Maytag automatic washer with three water levels, six years old, excellent condition. \$75.00 - Call DA 3-0890 after 5:00 p.m.

For sale - 1960 Ford Shop Manual, Call Kirk RE 9-9363.

For sale - 1960 Corvette, 1700 miles, radio, heater, 3 speed gear box, hard top, good condition, \$3200. Call Fred Dietrich EM 6-5152.

For sale - Sofa, folds into 3/4 bed, yellow plastic, similar to naugahyde, good condition. Call CH 5-1545.

For sale - Pontiac, 1939, six cylinder, 4 door sedan, radio, heater and good tires, mechanically excellent, 82,000 miles. \$150. Call Williams YO 7-7197.

For sale - Lafayette AM-FM Tuner. Like new. \$35. Call 968-3958 after 6 p.m.

For rent - Large sleeping room, private entrance and shower, car space available located at 710 View Street, Mt. View.

Riders wanted - Vicinity of Keyes and Story Roads. Call Susie ext. 277.

Ride wanted - From Stevens Creek and Orange Road area, 8:00 to 4:30 shift. Call Beverly Blanchard 253-6467 or ext. 335.

Ride wanted - From South 6th Street & Williams, San Jose to Moffett Field. 8:00 to 4:30 shift. Contact Navy ext. 256, John Luzardi.

For sale - Integrated stereo unit, all you need except the speakers and turntable. Stereo AM-FM, SW; stereo preamp; 24 watt stereo amplifier in one beautiful unit. \$150. Call AL 2-6691.

## "... Like I Need a Hole in the Head!"



This impromptu operation was performed last week under the skilled hands of Chief Surgeon Joe Quartuccio (SSS), Anesthetist Ray Meyers (Airc. Serv.) and Insurance Agent Tony Bengeveno (SSS). Second phase of the unique operation was to install an eyebolt in the top of the patient's head to allow him to be lifted into various simulator devices here via rope and pulley. Undergoing the ultimate in pilot adaptation to the requirements of flight simulator testing is, of course, Sierra Sam.



# BOWLING

.....by Dee Maines

CONGRATULATIONS TO SSFF, winners of the second third of the All Ames Bowling League. SSFF, the Mavericks, (winners of the first third) and the winning team of the last third will participate in the Championship play-off at the end of the season.

Team standings at the end of the second third were:

	W	L
SSFF	30	14
Electrical	29	15
Pinbusters	28	16
Afterburners	28	16
Orbinauts	24	20
Striking Dynamos	21	23
HBR	21	23
Shwiki	20 1/2	23 1/2
Machine Shop	18 1/2	25 1/2
Mavericks	17	27
EMC	16	28
Bahude	11	33

## COMING EVENTS SPONSORED BY THE AEC

El Cid Spectacular-- the early birds are gobbling up the first bunch of tickets. Call Ron Kauffman, ext. 252 or Hy Zimmer, ext. 258 as soon as you have a party made up. The date is March 25, the place is the Alexandria Theater, 5400 Geary Blvd., San Francisco.

Ames Spring Dinner-Dance--- Will be held at the Hawaiian Gardens some time in April. Charles Jackson, ext. 275 is the ticket chairman. Vicki Malatesta, ext. 252 is program chairman.

The Ames Annual Barbecue will be held at the beautiful Blackberry Farm in Monta Vista June 2. Arrangements are just getting underway now.

Employees of three years or more will be delighted to learn that an Ames Soiree, Mark III is planned for May 5. At the last Soiree, held in May, 1959 there were 110 colorful exhibits of the hobbies and handiwork of Ames employees including Fire Arms, Radio Control Models, Stereo Equipment, Cameo Carving, Oil Painting, Ceramics, Amateur



Successfully defending their 1961 Championship title were the members of the 3.5-Foot Branch basketball team, who compiled a 6-0 record in league play. Their only loss was in a post-season encounter with an all-league All-Star team. Team members were (l to r): Reuben De Los Santos, Marnell Smith, Jerry Carnesecca, Dick Peterson (Captain), John Rakich and Bob Nysmith.

## OSO SATELLITE . . . (Continued from Page 1)

upon thermal radiation to gain or lose heat to their surroundings. An important consideration in design of a spacecraft is the type of radiation surface used for temperature control.

For example, although most polished surfaces reflect a large part of the sun's rays, they give up the heat they do absorb at only a very low rate, and consequently reach high temperatures in the sun. White paints and enamels, on the other hand, while also reflecting most of the incident sunlight, emit heat at a high rate, which causes them to operate at low temperatures.

Stability of the thermal characteristics of temperature-control surfaces such as these is very important in the spacecraft design. Flight in the space environment, however, can cause changes in the radiation properties of surfaces, leading to inadequate tem-

perature control. The magnitude and rate of such changes is at present not known for most materials.

Ames "Emissivity Stability of Surfaces in a Space Environment" experiment consists of measuring the temperature of several test surfaces during exposure to conditions in space. From changes in the temperature of the surfaces with time, it will be possible to determine the amount and rate of change in the thermal radiation characteristics of the surfaces.

Project engineer for the experiment is Carr B. Neel, Heat Transfer Branch. Telemetry was designed by Gilbert G. Robinson, Guidance Systems Components Branch.

The **Astrogram** Room 111  
Administration Building  
Phone 385

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Radio, Stamps, Astronomy and a host of others. Hope to see you and your exhibit there! Contact Hy Zimmer for details.



# The Astrogram

AMES RESEARCH CENTER, MOFFETT FIELD, CALIFORNIA

VOLUME IV

MARCH 15, 1962

NUMBER 11

## Dr. Silverstein Receives Career Service Award

Dr. Abe Silverstein, Director of NASA's Lewis Research Center at Cleveland, received the National Civil Service League's Career Service Award at a banquet Tuesday night, March 13, at the Sheraton Park Hotel in Washington.

The award was in recognition of Dr. Silverstein's 32 years of leadership in aircraft and space technology, precluding his part in the Mercury astronaut program.

Dr. Silverstein is one of ten leading government people who will receive this award at this year's ceremony.

Dr. Silverstein began his scientific career with the National Advisory Committee for Aeronautics in 1929 at the Langley Research Center. There he helped design and later was placed in charge of the Full-Scale Wind Tunnel.

In 1943 he was transferred to the Lewis Laboratory at Cleveland. There, as Chief of the Wind Tunnel and Flight dynamics in the Altitude Wind Tunnel.

Following World War II, Dr. Silverstein was responsible for the conception, design and construction of our nation's first supersonic propulsion wind tunnels.

Dr. Silverstein was placed in charge of all research at the Lewis Research Center in 1949, and in 1952, he was appointed Associate Director of the Lewis Laboratory.

In May 1958, Dr. Silverstein transferred to NACA Headquarters in Washington to help plan the organization and programs of the NASA, subsequently becoming Director of NASA's Office of Space Flight Programs in Oc-

## Ames Givers to Join National Health Drive

### GIVE

for **BETTER  
HEALTH**



to your  
**NATIONAL  
HEALTH  
AGENCIES**



*generous*

**a gift from everyone!**

tober 1958. He directed those NASA programs concerned with mission planning, spacecraft design and development, and in-flight research operation. Development programs under his direction included space probes and manned and unmanned satellite systems.

Dr. Silverstein returned to Cleveland in November 1961, to take the helm of the Lewis Research Center as its director. There he is guiding the research and development of advanced space propulsion and power generation systems.

Dr. Silverstein is a native of Terre Haute, Indiana. In 1929 he earned the degree of Bachelor of Science in Mechanical Engineering at Rose Polytechnic Institute, and in 1934 he received a Mechanical Engineering Professional degree from the same school.

Once again Ames will join the voluntary National Health Agencies in their annual campaign among Federal civilian and military personnel for vitally needed funds to carry out the round-the-clock fight against crippling disease and mental illness.

Ames employees will have the opportunity to contribute through the Ames Givers Fund during the week of March 26-30, according to Edward H. Schnitker, Budget, Ames Givers Chairman.

The goal of the 1962 campaign is a generous gift from everyone. Employees who join in contributing to this drive will be assuring the advancement of important programs of medical research, community service and education, as well as participating in the American tradition of giving through independent, individual choice.

Eight National Health Agencies have been recognized and approved by the President's Committee on fund raising with the Federal service for on-the-job solicitation during the current fiscal year.

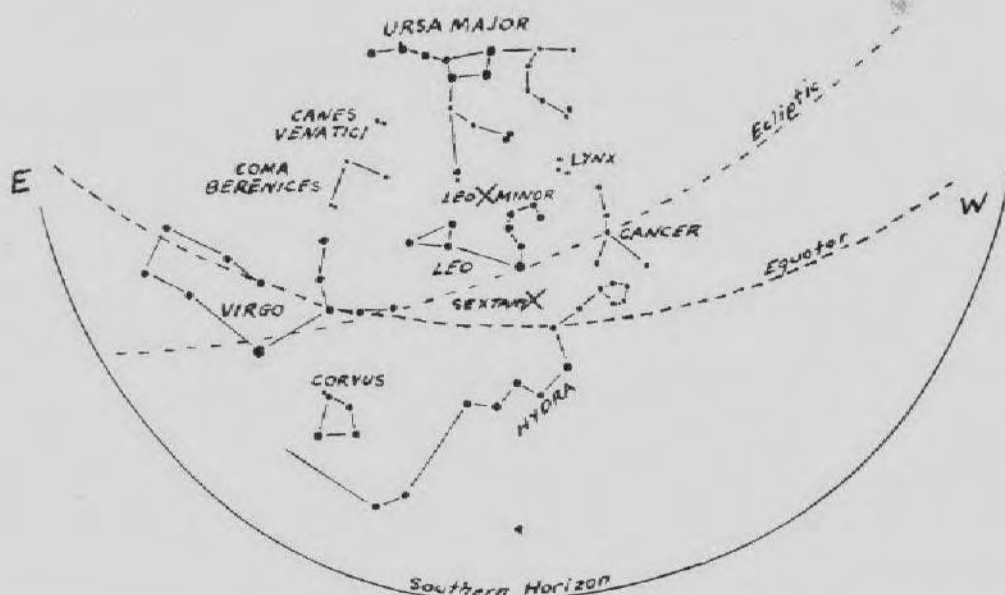
They are:

- National Multiple Sclerosis Society
- National Society for Crippled Children and Adults
- United Cerebral Palsy Associations
- The Arthritis and Rheumatism Foundation
- American Cancer Society
- American Heart Association
- Muscular Dystrophy Associations
- National Association for Mental Health

Employees may contribute to any agency of their choice, whether it is listed above or not. The agencies named above are those that have been nationally approved.

Contribution envelopes will be distributed to each employee by branch representatives. All contributions should be returned in the envelope to the representative no later than Thursday, March 29.





## Astroventuring... ★ with walt krumm

### KNOW THE SKY

#### IN THE VICINITY OF LEO

If you recall, we studied the constellation of Leo, the Lion last spring in the March 30, 1961 Astrogram. This is the constellation that is almost overhead now and characterized by a sickle-shaped group of six stars that mark the head of the Lion and a conspicuously large triangle to the east that represents the Lion's haunches.

Leo is bounded on the east by Cancer, the Crab (March 16, 1961), on the south by Hydra, the Sea Serpent (April 13), Sextans, the Sextant, the Corvus, the Crow (May 11), on the west by Virgo, the Virgin and Coma Berenices, Berenice's Hair (June 22) - and on the north by Ursa Major, the Great Bear or Big Dipper (April 27) and Leo Minor, the Little Lion. This is the way we used to study geography--California is bounded on the north by Oregon, on the east by Nevada, etc.,--and it's a good way to learn the sky, too. If you can picture mentally a constellation and name the ones around it, you've got it made.

The little asterism Sextans has been designated as a constellation, the Sextant, even though it contains no stars brighter than the fourth magnitude. It lies between Regulus in Leo and Alphard in Hydra. Look for the small grouping of stars in this area. There are two instruments of navigation in the sky to guide you

about: Pyxis, the Mariners Compass, in the south as part of the old area of Argo (Jason's ship had to have a compass to guide it, of course), and Sextans, the Sextant, which we have mentioned.

Leo Minor, the Little Lion, is the small grouping of faint stars between the hind feet of the Bear and the top or blade of the Sickle. On the old mythological sketches, Leo Minor is just a small counterpart of Leo himself.

Virgo, the Virgin, is a large zodiacal constellation and worthy of a separate write-up in a future issue.

There will be a fine "Star Party" on March 31st (weather permitting) on Highway 9 between Saratoga and Big Basin, two miles beyond the Saratoga Summit (crossing of Highway 5, the Skyline, and Highway 9). We expect plenty of people and telescopes. If you wish to have these constellations pointed out for you, plan to attend. Look for a red lantern on the left that will mark the observing area. Bring a pair of binoculars if you can.

## Recreation Roundup

.....by  
Vicki Malatesta

THE AMES CAFETERIA will be jumping every Friday night from now on. The Bridge Club meets there each week and the Stamp Club will get together the first and third Friday of each month.

FIRST PLACE WINNERS of last week's Duplicate Bridge play were Layton Lee (HBR) and Harry Bailey (HBR), while honors for second place went to Jack and Barbara Tunnell (FSS). Each member of the Club is out for points as Friday, April 6 will be Master Point Night.

IF YOU WANT TO SEE "EL CID" March 25 with the rest of the Ames clan, you had better make your reservations with Hy Zimmer, ext. 258 before March 16.

DEADLINE FOR RESERVATIONS for the April 10 Giants-Braves season opener is Monday, March 19. For \$4.50 you get round-trip transportation from Ames and a reserved seat at the game. Contact Jim Patterson, ext. 293 for details.

AN EVENING OF REAL PLEASURE is being planned for you Saturday evening, April 28 at the Hawaiian Gardens in San Jose. Dining, dancing, live entertainment and lots of fun and frolic are on tap. Chuck Jackson, ext. 275 has the tickets.

DON'T FORGET THE SOIREE May 5. Plan to make a day of it with your family and friends. To reserve space for your hobby display, see the Soiree insert in this issue.

35 MM SLIDE FANS will be interested to know that a group of employees are forming a slide club. Contact man is Richard Johns ext. 232.

### AMES CLUB, SPORT CALENDAR

ACTIVITY	TIME	DAY	PLACE	CONTACT
Bowling	6:30	Thurs	Mt. View	C. DeRose ext. 275
Bridge Club	7:30	Friday	Ames Cafe.	Art Kaskey ext. 224
Chess Club	7:30	1&3 Tue	Bishop Sch	K. McFarland ext. 293
Golf Club		Monthly		Ted Plum ext. 234
Pistol Club	7:00	Wed	USARTC	Sid Copeland ext. 232
35 mm Slide				Dick Johns ext. 232
Stamp Club	7:30	1&3 Fri	Ames Cafe.	Bob George ext. 224



SATURDAY, MAY 5

10 A. M. - 3 P. M.

AMES AUDITORIUM



## AMES SOIREE--1962

Here's a chance to let your fellow employees know what you do with your spare time. The Soiree is a showcase of your hobbies or special talents. Already signed up for display space are:

ASTRONOMY EXHIBIT -- John Delaney (Contracting), Duane Dugan (3.5-Ft.), Roy Griffin (HT), Ed Kelley (Mach) and Clara Williams (Acc'ting)

ARTIST COLONY -- William Ward (Mod Const), Tony Quartuccio (Trans), John Foster (GSC), Otis Strong (Mach Tab)

ORCHID GROWING -- Lyle Minden (RFE), Annette Bratlien (Acc'ting)

CAMEO CARVING -- Raymond Addison (MIB)

WOOD CARVING -- Victor Hugo (Mod Const)

FIREARMS -- Sid Copeland (Mach)

MOSAICS -- Herb Pankratz (Mach)

STAMPS -- Walter Krumm (Struct Dynam)

PHOTOGRAPHIC ARTS -- Jim Chloupek (SSS)

GIFT WRAPPING -- Ruth Zimmer

35 MM SLIDES -- George Holdaway (3.5-Ft.), Allan Weber (EIB), Dick Hamp (AFS)

JEWELRY -- Ben Mayo (EIB)

MODEL CARS -- Bob Eglington (RFEE)



DO YOU COLLECT mugs, jugs, rugs or bugs? Do you collect rocks, clocks, stocks or locks? Do you collect bees or honey, keys or money?

Sign up for your reserved space at the 1962 Soiree on the blank provided on the reverse side.



EXHIBITOR'S RESERVATION FORM

I want to reserve space for an exhibit at the Soiree.

I will need an area \_\_\_\_\_ feet by \_\_\_\_\_ feet.

I will need \_\_\_\_\_ table(s).

I will need an electrical outlet, Yes \_\_\_\_\_ No \_\_\_\_\_

Name \_\_\_\_\_

Branch \_\_\_\_\_

Phone \_\_\_\_\_

Type of Exhibit \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Form A

----- Fold Here -----

COLOR SLIDE EXHIBIT

SOIREE

Please enter the following slides in the Slide Show:

	<u>Title</u>	<u>Data (Subject, Location, etc.)</u>
a.	_____	_____
b.	_____	_____
c.	_____	_____
d.	_____	_____
e.	_____	_____

Name \_\_\_\_\_

Branch \_\_\_\_\_ Phone \_\_\_\_\_

Form B

----- Then Fold Here -----

From \_\_\_\_\_

\_\_\_\_\_

**Hy Zimmer, Chairman**

**Ames Entertainment Committee**



# Ames Airings

.....by  
Scharon Scharmen

## Bea Aikman Cited for Superior Performance



Mrs. Beatrice Aikman, Ames receptionist, has received NASA's Sustained Superior Performance Award for the outstanding qualities of tact, good judgement and organizational knowledge she has displayed in carrying out her duties of meeting and directing visitors since coming to Ames in 1950.

The award was granted by the Ames Incentive Awards Committee and presented to Mrs. Aikman by Dr. Smith J. DeFrance, Director, in ceremonies conducted Friday, March 9 in the Director's office.

The NASA Sustained Superior Performance Award includes a letter of commendation signed by the Director and an appropriate cash award, in this instance amounting to \$250.

The letter of commendation to Mrs. Aikman reads in part, "Throughout the years your professional skills have been recognized and valued as an important asset. The increase in visitors during recent months has placed upon you an even heavier burden of responsibility to which you have responded with unfailing tact, courtesy and resourcefulness. In every respect, your skill and efficiency in dealing with difficult situations, arranging prompt contacts with Center officials and in welcoming large numbers of people agreeably and tactfully has been a valued contribution to the fine public reputation Ames Research Center enjoys."

## Want Ads

For sale-Two hi-efficiency matched speakers, 15" woofers, excellent bass. \$40.00. Phone YO 8-1200.

For sale-Three bedroom insulated home, 1 1/2 baths, family room with fireplace, built-in stove, garbage disposal, drapes, large cement patio, fenced yards, completely landscaped front and rear, very clean, 3 years old, owner will carry second mortgage. \$18,950. Call AN 9-0569 (home) or ES 7-3296.

For sale-White male Toy Poodle, 4 years old, proven stud, AKC registered, house broken, loves children, sacrifice \$100.00. Call CY 3-2613 after 5 p.m.

For sale-MGA Amco grill guard, cost \$30, sell for \$17. Call 948-4926.

For sale-Golf clubs, 2, 5, 7, and 9 irons and #2 wood, plaid bag. Next to new, bargain at \$40.00. Call YO 7-4643.

For sale-Frigidaire electric range, \$65.00 and water softener, 72,000 grain, \$50.00. Phone AX 6-6754.

Wanted-Person interested in joining ride group originating at Lark Ave. - Hwy 17 intersection, 8:00-4:30 shift. L. Graham, ext. 202 or ES 7-1032.

Riders wanted-Bayshore route from vicinity of IBM Plant, 8:00-4:30 shift. Call Irene Tharp, ext. 355.

Ride wanted-Vicinity of Lawrence Station Road and El Camino Real, 8:00-4:30 shift. Call Nancy Hopkins, ext. 517.

Ride wanted-From vicinity of Isabella and Catherine Sts. in Santa Clara, 3 blocks off El Camino, 8:00-4:30 shift. Call Mary Dawson, ext. 411 or CH 1-6524.

Ride wanted-From Stevens Creek-Orange Road area, 8:00-4:30 shift. Call Beverly Blanchard, ext. 335 or 253-6467.

For sale-Alpoa Vacation Trailer, 12', sleeps 5, electric brakes, butane, \$450. Call Cooper, UN 7-3335.

Room 111  
Administration Building  
Phone 385

**Astrogram**

The Astrogram is an official publication of the Ames Research Center, NASA, Moffett Field, California, and is published bi-weekly in the interest of Ames employees.

Edited by.... Brad Wilson and Don Schilling  
Reporters.... NASA Employees

Deadline for contributions:  
Thursday between publication dates.



## Apprentices Get Training Certificates, Journeyman Status



Edward W. Betts, Chief of Technical Services Division; Charles W. Scheller, Jr. (SSS), Aircraft Mechanic; Benjamin F. Mollusky (HBR), Aircraft Mechanic; Tommy C. Byrd (Struct Fab), Metal Fabricator; James F. Park (Struct Fab), Metal Fabricator; Albert M. Perkins (Struct Fab), Metal Fabricator; Gerald R. Payton (Struct Fab), Metal Fabricator. Absent was James L. Eddy (ASM), Aviation Metal-smith.



Laurence A. Montgomery, Sr., Head of Electrical Services Section; Richard C. Habenicht, Assistant Head of Electrical Services Section; Andre G. Buck, Chief of Research Facilities and Equipment Division; Sebastian S. Sandoval (RFEE), Electrician; James J. Deibert (RFEE), Electrician.



James A. White, Chief of Instrumentation Division; Amile W. Johnson (MIB), Instrument Maker; Melvin L. Swensen (MIB), Instrument Maker; Robert W. Delaplaine (MIB), Instrument Maker.



Edward W. Betts; Gerald Wichman (Mach), Machinist; William D. Angwin (Mod Const), Modelmaker; Manuel J. Fontes (3.5-Ft), Modelmaker; Marnell Smith (3.5-Ft), Modelmaker; James O. Jorgensen (3.5-Ft), Modelmaker. Absent was Robert Avila (Mach), Machinist.

Twenty-three Center employees have received Journeyman ratings as a result of their completion of four years of apprentice training under Ames Mechanic Learner program.

Including such trades as Wind Tunnel Mechanic, Model Maker and Electronic Instrument Maker, the program assures a plentiful supply of well-trained journeymen to fill openings in Ames craft positions.

The apprenticeship certificates were presented to the graduates by their respective division chiefs recently in informal ceremonies. Edward W. Betts, Chief of Technical Services Division in which most of the men are employed, made this statement in appraising their accomplishment:

"This is another outstanding class that has finished the comprehensive apprenticeship training program offered here at Ames. We welcome them as journeymen in their respective trades, and feel sure these craftsmen will be a credit to NASA."

Starting next October, apprenticeship certificates will be awarded at the annual NASA service pin presentation ceremonies.



James A. White; Floyd W. Moffitt (AFS), Electronic Instrument Maker; Lonnie J. Phillips (EIB), Electronic Instrument Maker; Richard D. Hamp (AFS), Electronic Instrument Maker; Raymond Sargis (EIB), Electronic Instrument Maker; Herbert Mills (EIB), Electronic Instrument Maker.



## NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

# The Astrogram

AMES RESEARCH CENTER, MOFFETT FIELD, CALIFORNIA

VOLUME IV

MARCH 29, 1962

NUMBER 12

### NASA Establishes Launch Operations Center

NASA has established its launch facilities at the Atlantic and Pacific Missile Ranges as independent field installations.

At Cape Canaveral, Florida, the installation will be designated the NASA Launch Operations Center. Dr. Kurt H. Debus has been appointed director and will report to D. Brainerd Holmes, Director of Manned Space Flight, NASA Headquarters, Washington, D.C.

At Point Mugu, California, the NASA Test Support Office is established as the NASA Pacific Launch Operations Office. Its acting director, Cdr. Simon J. Burttschell, will report to Dr. Homer E. Newell, Director of Space Sciences, NASA Headquarters.

NASA's Associate Administrator, Dr. Robert C. Seamans, Jr., said the Launch Operations Center will serve all NASA projects launched from Cape Canaveral but will report to Mr. Holmes to assure immediate responsiveness to the many jobs there involved in the manned lunar landing program.

"The Center at AMR consolidates in a single official all of NASA's operating relationships with the Air Force Commander of AMR," Seamans said. "In addition, the single organization will ensure the best possible planning for and use of common facilities, equipment, services and support personnel for launchings from Cape Canaveral."

Dr. Seamans said similar but more limited arrangements will be made at the Pacific Missile Range. The Pacific Launch Operations Office will report to Dr. Newell because his office has most of the NASA launches scheduled at PMR.

Detailed organizational arrange-

### Ames to be Represented at Brussels AGARD Meeting Next Week

Three members of the Ames research staff will present papers before the annual meeting of the Advisory Group for Aeronautical Research and Development in Brussels, Belgium, April 3-6.

They are H. Julian Allen, Assistant Director; Thomas N. Canning, Chief of Hypervelocity Ballistic Range Branch; and Bradford H. Wick, Chief of Fluid Mechanics Branch.

The papers will be given before the Fluid Mechanics Panel.

"Hypersonic Aerodynamic Problems of the Future" by H. Julian Allen discusses such aspects of hypersonic atmosphere entry as the use of slender shapes to avoid excess heating by air radiation, the combination of retrorocket and aerodynamic braking for economy, the need for continued experimental research in the complex analytical approaches to hypersonic entry and the utilization of meteor tracking data to provide useful aerodynamic heating information.

"Measurements of Radiation from the Flow Fields of Bodies Flying at Speeds up to 13.4 Kilometers per Second," by Thomas F. Canning and William A. Page, Assistant Chief of Supersonic Free-Flight Wind Tunnel Branch, discusses the process of radiative heating in terms of the physical

and chemical changes involved. Emphasis is placed upon the variance of calculated radiation with that of measured radiation especially in the presence of non-equilibrium flow effects.

"Radiative Heating of Vehicles Entering the Earth's Atmosphere" by Bradford H. Wick considers the problem of calculating the equilibrium radiative heating of vehicles entering the Earth's atmosphere at velocities up to twice satellite velocity, with particular attention given to the cases of manned vehicles returning from trips to the Moon and Mars.

At the conclusion of the AGARD meeting Allen, Canning and Wick will visit various research activities in Great Britain and France before returning to the United States.

### INTER-AGENCY PROGRAM ESTABLISHED FOR NORTHERN CALIFORNIA

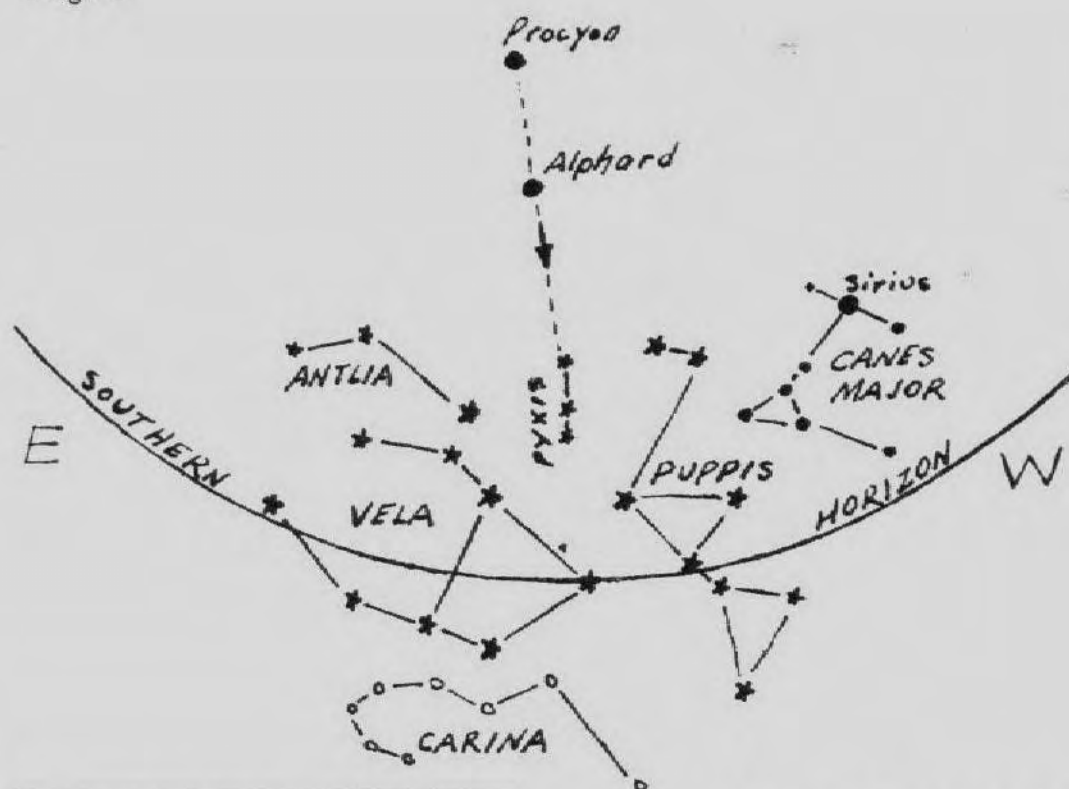
The 12th Civil Service Regional Office is accepting applications from status employees serving in positions at GS-9 and above who are interested in transferring to another Federal activity in Northern California. Initially applications will be accepted only for positions at GS-9 or above in the following fields: ACCOUNTING AND AUDITING (GS-510 only); MANAGEMENT ANALYSIS (GS-343 only); PERSONNEL (all specializations in GS-200 series); CONTRACT & PROCUREMENT (all specializations in GS-1102 series).

Applications filed under the Inter-Agency Transfer Program will be made available for review by Federal activities in Northern

(Continued on Page 3)

ments and personnel assignments are being drafted. At Marshall Space Flight Center, Huntsville, Alabama, a Launch Vehicle Operations Division is established to replace MSFC's Launch Operations Directorate which is being absorbed by the new Launch Operations Center. It will be directed by Dr. Hans F. Gruene who has been deputy director of LOD.





## Astroventing...

★ with walt krumm

### KNOW THE SKY

#### THE ARGO GROUP

Along our southern horizon this time of year we see the tops of constellations that were once the constellations of Argo, the Ship. This is the area roughly between Canis Major, the Greater Dog, and Crux, the Southern Cross. When the constellations were named, this area carried the name Argo. This is the boat that Jason used when he sailed off in search of the Golden Fleece. A mighty elaborate vessel it was indeed, as pictured in the old drawings.

The modern astronomer has divided this area into five parts and named the constellations after different parts of the ship: Antlia, the Hold; Carina, the Keel; Puppis, the Stern; Vela, the Sails; and Pyxis, the Compass. Volans, the Flying Fish, and Hydrus, the Sea Serpent are in this southern sky too, but to the Astroventurer's knowledge mythology does not say whether the Sea Serpent bothered Jason, or if he even saw any Flying Fish. These last two are not visible from our latitude so we do not have to bother with them.

Puppis, the Stern of the Ship, is just to the east and south of the Dog and has some fine areas for viewing. The Spring Milky Way runs right through this area and it has many objects of interest in it.

The Ship has to have a compass,

so Pyxis is included. The whole of this small constellation is visible from here, as is Antlia, the Hold.

Carina, the Keel, is too far south for us, but the greater part of Vela the Sails is mostly visible.

The sketch gives an indication of these constellations and we should know them so that we do not have a blank in this area of the sky.

## Want Ads

For sale-Hotpoint refrigerator with small freezer, excellent condition. Make offer. Call EM 6-7881.

For sale-Used piano, good tone but needs repairs. Will be shown Monday, April 2 at the rear of the 40- by 80- storage area 11:30 a.m. to 1 p.m. Best offer takes it.

For sale-Beautiful, new, contemptible Wilson putter, \$7.50. G. Saunders, call 591-0841.

For sale-Tire chains, size 6:70-15, slightly used, \$3.00. Call M. Hansen at Re 9-9647.

For sale-3 bedroom, one bath home, large living and dining area, nice kitchen. Extra bonus large, unfinished, covered family room. Nicely landscaped, completely fenced, 8 years old, located in San Jose. Asking \$13,500. Call CY 2-9982 or AN 6-8506 after 6. Mr. Gammell.

For sale-Pedigree Toy Dachshund Puppies, two females. Call DA 3-0194.

Wanted-Portable typewriter in good condition. Eve Wunn, DA 4-4825.

Ride or share driving-From City of Fremont, 8:00-4:30 shift. Call Al, ext. 512.

Ride or share driving-Vicinity of New Jersey and Shulman, San Jose, 8:00-4:30 shift. Call Don Kaser, ext. 512.

Ride Wanted-From Campbell, 300 S. Union Avenue, 8:00 to 4:30 shift. Call Esther Howard ext. 329.

For sale-Pontiac Grand Prix, 2,900 actual miles, new car guarantee, will take trade. Original Price \$4500, selling for \$3800. Call CY 7-4140.

## Ames Airings

.....by  
Sharon Scharmen

Word is that CLARK WHITE's (SSFF) social life is becoming almost more than he can handle lately. The reason? He recently bought a brand new PINK T-Bird!

.....Sure and begorra it was a day for the Irish when "Pop" Mellick (Security) became a groom for the second time in his life. "Pop" lost his long-wed wife a couple of years ago so he and his little dog were pretty lonely. As things happen, one day about six months ago, "Pop" and an old sweetheart, Vanita Caldwell, met again. Mrs. Caldwell was a widow now and also quite lonely. They had first met in Chicago when "Pop" was a member of the police force many years ago. The two had dated but later went their separate ways in life. The happy couple were married on St. Patrick's Day at St. Lucy's Catholic Church in Campbell. Following the wedding some 200 people joined the Mellicks in celebration at a champagne reception at the Stardust Motel in Los Altos. The happy couple are honeymooning around the state for a few weeks and will then make their home in Los Altos.....

As you see we have the space  
This is the time and the place  
To send your items in to Sharon  
For then a smile she will be  
wearing!

Please submit any newsy bits of information to the Astrogram for the Ames Airings column.

### BLOODMOBILE VISIT SCHEDULED APRIL 26

The Santa Clara Valley Bloodmobile will visit Ames Thursday, April 26 from 9 a.m. until noon.

All Ames employees who wish to donate blood may sign up on the sheet provided for that purpose in each branch office or call Personnel, ext. 411 for an appointment. As before, members of an employee's family may donate also.

Blood on deposit at the Blood Center is available to all Ames personnel and their immediate families.



# Personnel-ly Speaking

Because of the many inquiries being received from Federal employees and others about the President's proposal for salary reform, the Civil Service Commission has prepared the following questions and answers about the background and effect of the proposal.

## QUESTIONS AND ANSWERS REGARDING THE PRESIDENT'S PROPOSAL FOR REFORM OF FEDERAL STATUTORY SALARY SYSTEMS

Q. What are the major features of the proposed pay reform bill?

A. The bill would for the first time establish a basic policy for adjusting and administering Federal statutory salaries, based on a yearly review of comparable salaries in private enterprise, would provide proper relationships among various statutory salary systems, and would provide additional and very much needed flexibility in salary administration.

Q. What method was used to determine that the proposed new salaries are comparable with salaries in private industry for the same levels of work?

A. The basis of the proposed salaries is the 1961 survey report of the Bureau of Labor Statistics, which furnished private-enterprise salary information for occupations representative of the Classification Act.

Q. Is any provision being made for higher pay for shortage-category positions?

A. Yes. A more flexible method is being proposed for attracting candidates for hard-to-fill positions. Instead of raising entrance pay above the minimum and leaving the maximum of the grade at the same level, a method of pay which reduced and sometimes eliminated incentives, the new bill would provide for raising rates for the whole grade. For example, if \$9,380 was the minimum and \$12,215 was the maximum of GS-12, and it was decided to raise the entrance salary for a certain job to \$10,640 (5th step), an increase of \$1,260, each succeeding step would be raised by the same amount for a total of the entire 10 steps, making the maximum \$13,475. In no case could the entrance salary be raised above the normal maximum of the grade.

Q. Could hiring at a salary above the minimum of the grade be done in individual cases?

A. Yes. In order to attract high-quality personnel to the Federal service, individuals with exceptionally high qualifications could be hired at salaries above the minimum of the grade. This is also a practice in private industry.

Q. When would the raises be effective?

A. The proposed increases would be spread over a 3-year period -- effective in January of 1963, 1964, and 1965, respectively -- in order to prevent undue budgetary and economic impact in any one year. The first raise would be the largest.

Q. Does the pay reform bill make any provision for within-grade raises because of excellent work?

A. Yes, the bill would allow giving merit increases not oftener than once a year in order to reward and encourage high quality performance. This is an established practice in private industry, and was formerly permitted by the Classification Act as late as 1954.

Q. Would a minimum raise be provided for an employee who is promoted from one grade to another?

A. Yes. His salary would be increased an amount that was at least the equivalent of two steps of the grade from which he was promoted.

Q. In converting a General Schedule employee to the new pay scale, how would it be determined what step he will be in?

A. He will go in the corresponding step. For instance, if he is in the fourth step of GS-5, he will go in the fourth step of the new GS-5.

## Golf Notes

.....by  
Ruth Richardson

March 17, "Paddy's Day," found 48 Ames golfers battling for honors in individual low net play at Hillview Golf Course.

First place winners received striking trophies, second place winners were awarded merchandise certificates and all other winners received golf balls. Consolation winners won small trophies.

First flight winners were Paul Barisich (Mach), first; Roy Griffin (HT), second; Bob Nysmith (HBR), third; Frank Lazzeroni (6-by 6-), fourth; Lary Graham (Fluid Mech), Dick Petersen (3.5 - Ft) and George White (6-by 6-) tied for fifth place.

Second flight winners were Sam Pitts (3.5-Ft), first; Howard Matthews (G & C) second; Harold Clements (HBR), third; Nick Vojvodich (HT), fourth; Jim Nelan (Mod Const) and Armando Lopez (FSS) tied for fifth place. John Van Etten (Security) won the consolation prize.

In the third flight Phil Johnston (Ent Sim), won first place; Charles Lavarney (Unitary Ops), was second; Bill Warren (ASM), and Russ Fahey (11-Ft), tied for third place; Harry Stefani (Mach), was fourth; Gene Lyman (HPR), was fifth and Kay Bruck (G & C), won Consolation.

The next tournament will be held at the Aptos Beach Golf Club on April 14 with tee-off time at 9:30 a.m.

## INTER-AGENCY...

(Continued from Page 1)

California who are interested in filling vacancies by transfer.

The 12th Civil Service Region invites interested and qualified employees to apply under the Inter-Agency Transfer Program by filing Standard Form 57 (in duplicate), available from Employment Branch, Room 111 of the Administration Building. Separate applications must be filed for each occupational field and for each specialization. "Inter-Agency Transfer Program" should be written in at the top of the first page of the SF-57. Send applications to Director, Twelfth U. S. Civil Service Region, 630 Sansome Street, San Francisco 11, California.



## Low Level Light Observatory Under Construction Here

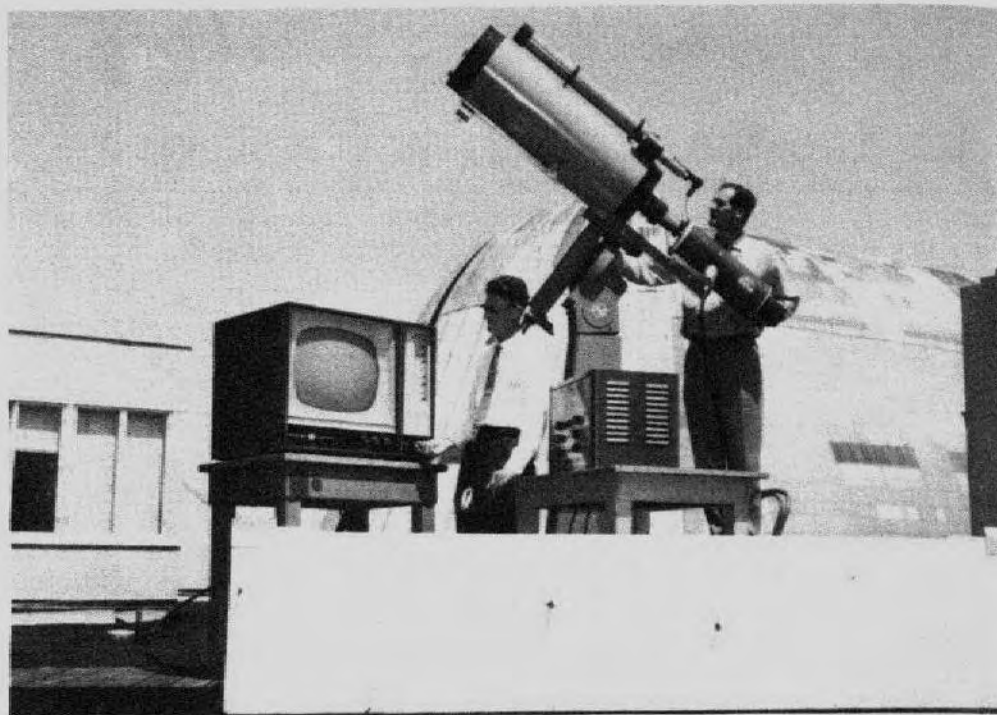


Members of Low-Level Observatory group aid workers in placing dome over telescope pedestal on roof of Space Flight Simulation Laboratory.

Nearing final stages of construction on the roof of the Space Flight Simulation Laboratory is Guidance Systems Components Branch's astronomical observation station. When completed it will be capable of detecting stars far to faint for the human eye to see.

Astronomers have long known that there are countless star systems either so far away or of such low intensity that they are invisible through ordinary telescopes. While a number of low intensity stars have been discovered by exposing photo-sensitive plates to a portion of the sky through large telescopes for long periods of time, the process is generally unsatisfactory for today's accelerated exploration of space.

The Ames observation system



James Swain (center) and George De Young are two of the members of GSC Branch who are developing a closed circuit TV system for making low level light studies of distant stars.

consists of a closed television circuit and a 12-inch reflecting telescope. A specially designed, high sensitivity TV camera utilizes the telescope as a lens and relays the "live" image of the target star to the television receiver. With this system Ames researchers will be able to make low level light studies under much

more favorable conditions than have previously been available. The station is expected to be operational in six months.

Members of Guidance Systems Components Branch who have been associated with the project are James R. Swain, George De Young, Gilbert G. Robinson, Frank A. Pauli and John Guenther.

## Recreation Roundup

.....by Vicki Malatesta


**FLASH!!** THE TITLE "AMES RECREATION COMMITTEE" has replaced our former title of Ames Entertainment Committee. What with the current interest in professional baseball, football and other sports plus the growing interest in playgoing, stamp collecting and intellectual competition such as chess and bridge and so on, the change has been necessary to reflect the true nature of our activities.

**ABOUT 60 EMPLOYEES SAW "EL CID"** last Sunday evening at the Alexandria Theater in San Francisco. This event served as a fine beginning for the ARC's spring activities.

**NEXT ON THE LIST OF EVENTS** is the Spring Dance at the Hawaiian Gardens Saturday evening, April 28. Main attraction will be the two-act play Janus, a charming comedy about two short story writers and the eternal triangle. It will be presented by the King DoDo Players. Tickets are available from Chuck Jackson, ext. 275.

**LAST FRIDAY NIGHT'S BRIDGE WINNERS WERE:** Ed and Marjorie Collins, first; Jimmy Kaskey and Fay Hickok, second; Ron Kauffman and Alan Levin, third. Friday, March 16 winners were Ron Kauffman and Alan Levin, first; Ed and Marjorie Collins, second; and Jack and Barbara Tunnell, third. Remember, Master Point Night is coming April 6.

**THE SOIREE RESERVATION LIST GROWS AND GROWS.** Send your request for space at this May 5 spectacular to Hy Zimmer, Analog and Flight Simulator Branch, ext. 258.

**The  
Astrogram**

Room 111  
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# The Astrogram

AMES RESEARCH CENTER, MOFFETT FIELD, CALIFORNIA

VOLUME IV

APRIL 12, 1962

NUMBER 13

## Employees Receive NASA Headquarters Award



Dr. Smith J. DeFrance, Director (left), presented three Ames employees a total of \$600 Tuesday in behalf of the NASA Inventions and Contributions Board. Jess S. W. Davidsen (second from left), Chief of Research Equipment Engineering Branch and Estin H. Baker, also of REE Branch, received awards of \$250 each for the invention of the Ames 5° of Freedom Simulator. Gilbert G. Robinson of Guidance Systems Components Branch (right), was awarded \$100 for the invention of a Multichannel Variable Pulse Width Oscillator.

## NASA Selects Contractor for Project Fire

The National Aeronautics and Space Administration will negotiate a contract with Republic Aviation Corporation, Farmingdale, Long Island, New York, for the Project Fire flight reentry research program.

The approximate \$5 million contract calls for construction of two reentry spacecraft to be flown in the second half of 1963.

Purpose of Project Fire is to obtain data on heating rates, high-temperature materials, and loss

of communications at reentry speeds of 25,000 miles an hour. Data from the program will be applied to problems of reentry for manned and unmanned lunar missions.

The Project Fire spacecraft--weighing about 200 pounds--will include a blunt heat shield, instrumentation to measure heat rates, and telemetry equipment to radio the information to data acquisition stations of the Atlantic Missile Range.

## First Launch of Centaur Vehicle Scheduled

The first Centaur launch vehicle will be test flown in the next several days by the National Aeronautics and Space Administration. The rocket will be launched over a medium range ballistic trajectory from Cape Canaveral, Florida, in a preliminary test to provide a broad range of information needed for the further development and orbital testing of the system.

This will be the first U.S. attempt to launch a vehicle that uses high-energy liquid hydrogen fuel. The upper stage of Centaur is powered by two RL-10 liquid hydrogen liquid oxygen engines, each developing 15,000 pounds of thrust.

Hydrogen offers more pounds of thrust per pound of propellant consumed per second than any other fuel possible in chemical rockets. It provides approximately 40 per cent more thrust per pound of propellant flow per second than hydrocarbons such as kerosene which are used in some of the conventional rocket engines.

## RESULTS OF HEALTH AGENCIES DRIVE SOON TO BE ANNOUNCED

Ed Schnitker (Budget), Chairman of the Ames Givers Fund, has announced that 1275 of the approximately 1600 envelopes sent out for donations to the various health agencies drive have been returned. Schnitker indicated that it would be appreciated if the remainder of the envelopes were turned in immediately either to himself or to the Fiscal Division.

The results of the drive will be announced as soon as the collecting agencies for the various funds involved have tabulated the amounts and reported to Ames. The sealed envelopes are turned over directly to these agencies and no tabulation is made here.



## Astroventuring... ★ with Walt Krumm



"YOU TOO CAN BE THE OBSERVER"

### SEE THE SKY

#### AN ASTRONOMY CLUB FOR AMES

Friday evening, April 20th, 8:00 p.m., the Cafeteria, has been set for the organizational meeting of an Ames Amateur Astronomers Club, with a visit to "The Observatory" (see picture above) for some viewing after the meeting.

At a recent meeting the desire to form an astronomy club was indicated and the possibility of using the telescope was discussed. We now have approval from the Director's Office for the club and permission to use the telescope.

A lot of enthusiasm has been created among Ames employees by the Astroventuring articles in the Astrogram. Often it has been someone that does not have a telescope of his own. This is the opportunity to put the desires created by this enthusiasm into actuality with the use of this fine instrument. Bring your ideas for a club, your thoughts for a program, and your desires for observing to this meeting. Help us build into this club your wishes.

A few of the collected thoughts for the club are: (1) To have a meeting only two or three times a year for the transaction of business (short) and, possibly, to hear an invited speaker. (2) To

have many observing sessions at the telescope to SEE the events and objects of interest in the sky. (3) To pursue some phase of astronomy of interest to the group that would be of benefit to the science.

One large item of business for this first meeting will be the discussion of our display at the coming May 5th Soiree. Bring your thoughts and ideas for this display so that we may effectively present our hobby to others.

#### WALT KRUMM

Temporary Chairman, for the organization of the Ames Amateur Astronomers.

You can call Ames from outside telephones with less delay now by dialing YORKSHIRE 8-9411. YO 7-5581 is still in service.

## King DoDo Theatre Dinner Menu

\$4.75

(Price includes ticket to King DoDo Playhouse)

### Iced Relish Plate

Hearts of Celery    Radishes    Carrot Sticks    Waxed Peppers  
Ripe Black Olives    Thin Sliced Italian Salami  
Fresh Melon Ball and Papaya Cocktail Supreme

### SALAD

Garden Fresh Tossed Green  
(Choice of Dressing)

### ENTREES

Stuffed Boneless Leg of Capon on Toast,  
Sauce Poulette Amandine  
Crisp Southern Fried Disjointed Chicken on Toast, Country Gravy  
Sugar Cured Smoked Virginia Ham Steak, Brandied Yams,  
Pineapple Ring  
Breaded Choice Top Sirloin Steak a la Contadina  
Fresh Atlantic Ocean Scallops, Tartar Sauce  
Fancy Jumbo Louisiana Deep Fried Prawns, Fancy Lemon,  
Cocktail Sauce  
Tiny Chilean Lobster Tails, Madera Sauce, Served in a Rice Ring  
Fresh Vegetable    Potatoes du Jour

### DESSERTS

Home Made Pie    Sherbet    Ice Cream

### BEVERAGES

Coffee    Tea    Milk

(Theatre Special . . . Split of Champagne 1.00)



Nancy O'Beirne (HBR) invites you to join your friends at Ames Spring Dance to be held Saturday evening, April 28, at the Hawaiian Gardens.



# Recreation Roundup

.....by Vicki Malatesta

JUST IN CASE YOU ARE WONDERING why the tickets to the Spring Dinner-Theater-Dance are \$5.00 per person for each Ames employee and his guest, here is an idea of what kind of an evening is in store for you:

Dinner will begin at 6:30 p.m. For those who like a "Happy Hour," please arrive ahead of time!

Beginning at 8:30 p.m. the comedy "Janus" will be presented in the King DoDo Playhouse.

During intermission we can stroll through the lovely Hawaiian Gardens. Just in case there are some of you Guys and Gals who will have to come stag, let the ARC know so that we can make you feel welcome!

HERE ARE THE MASTER POINT WINNERS from the Friday, April 6 bridge tournament: North-South winners were Pat Moody and June Spaulding, first; Ron Kauffman and Alan Levin, second; Tom Snouse and Jim Hansen, third. East-West winners were Ed and Marjorie Collins, first; Grace Dickson and Mariel Meyer, second; Howard and Audrey Matthews, third. March 30 winners were Pat Moody and June Spaulding, first; Tom Snouse and Jim Hansen, second, Dwight Moody and Bob Spaulding, third.

THE AMES SOIREE EXHIBITOR'S RESERVATION FORMS are flowing into Hy Zimmer, Chairman of the Ames Recreation Committee. Here is a preview of what to expect!

R. T. Jones.....	(Theo.).....	Violin Making
Al Clark.....	(Model Shop).....	Plastics
Bob George.....	(St. Dyn.).....	Stamp Collecting
James Karabas.....	(Mach. Shop).....	Jewelry
Dan Kirk, Roger Craig, and John Paterson....	(All SSFF).....	Stock Market Analysis
John H. Harmon.....	(SFB).....	Race Car
Earl Olson.....	(HT).....	Oil Painting
Anthony Quartuccio....	(Transportation)...	Oil Painting
Edward R. Kelly, Jr....	(Mach. Shop).....	Telescope
Buddy Camacho.....	(RFEE).....	Pictorial Travelogue and Color Slides
Richard Tate.....	(Supply).....	Match Book Collection
Emmett B. Fry.....	(FSS).....	Photographs (Black & White)
Annette Bratlien.....	(Accounting).....	Orchid Growing
Otis R. Strong.....	(Machine Tab).....	Painting
Iola Hogan.....	(Machine Tab).....	Ceramics

TONY QUARTUCCIO (TRANSPORTATION) is donating a door prize of a painting, so if you need a new picture for your bare office walls please come to the Ames Soiree on Saturday, May 5th, 1962, from 10:00 a.m. to 3:00 p.m. and see your fellow employees and their various hobbies. If any of you have color slides there is still room for 30 more exhibitors, so please do not be bashful and send in your name, telephone ext., and exhibit now to the Soiree Chairman, Hy Zimmer... in AFS.

THIRTY-NINE CHEERING GIANT FANS from Ames attended the opening day game at Candlestick Park in San Francisco last Tuesday, April 10th. The chartered bus left the 7 x 10 Tunnel on time with cheering, happy rooters and found that this will be a wonderful way to see the 49'er Football Games this fall without the worry of driving or parking. For those of the Ames personnel who would rather go in their own cars, but would still like Jim Patterson-EIB, to secure their reserved seats for them, now is the time to see him about same.

DON'T FORGET TO GET YOUR TICKETS to the Theater-Dinner Dance at Hawaiian Gardens from Chuck Jackson, Ext. 275, SSFF, as it will be a real evening of fun that you will never forget; plus the fact that the engagement of two fine Ames people will be celebrated, which is mentioned in another column of this paper!

## NATIONAL ROCKET CLUB ANNOUNCES SPONSORSHIP OF THE ROBERT H. GODDARD HISTORICAL ESSAY COMPETITION

The National Rocket Club has announced it is sponsoring an annual national essay competition on the historical development of rocketry and astronautics. The competition is being called the Dr. Robert H. Goddard Historical Essay Competition, in honor of the famous American rocket pioneer.

The essay competition is the first project of the National Rocket Club's Committee for the History of Rocketry and Astronautics, and, according to the Committee, is the only literary competition devoted to historical affairs in the field of rockets and their applications. Members of the Committee will serve as judges for the contest.

The essays submitted under the competition may treat with any significant aspect of the historical development of rocketry and astronautics, and will be judged on their originality and scholarship. They may bring new information to light, or may cast a new or different light upon events or individuals influencing rocket technology in the U.S. The competition is open to any U.S. Citizen.

The Rocket Club said that essays should be submitted by November 1, 1962, to the "Goddard Historical Essay Competition," National Rocket Club, Suite 32, 1745 K Street, N.W., Washington 6, D.C. The winner of the competition will be announced at the Robert H. Goddard Memorial Dinner on March 15, 1963, and a prize of \$200 and an appropriate trophy will be awarded. The official rules may be seen in the Astrogram office.

## PARKING LOTS UNSAFE?

Yes, when some drivers do not heed posted "No Thoroughfare" signs and make it into a street. Guards have been instructed to issue citations for this unsafe practice.

The two parking lots just west of the Space Flight Simulator Laboratory is the area in question. This problem is most noticeable at close of the business day.

Prevent an accident-- use care, good judgement, and obey the signs.



# Personnel-ly Speaking

## WHAT IS POSITION CLASSIFICATION?

The basic principle of classification is very simple. Classification, whether one classifies positions, commodities, or anything else, consists of placing things in classes. One places in the same class the things that are alike in most respects and in different classes the things that are different in those respects. If you'll look about, you'll find classification widely used in everyday life.

The arrangement and pricing of groceries in a store is a very effective method of classification.

It makes sense to arrange all bread in the same location and all meat together. Canned foods, soap, juices, and other types of items are likewise arranged separately to put system and order into managing the store and serving its customers.

The organized arrangement makes it simple to put the proper value or price on all the items in one group, and it makes it easy for customers to find what they want. This, of course, is absolutely necessary to good store management.

Exactly the same principle applies in position classification. Positions must be treated in an orderly way in the Federal service. There are many positions and they are of many different types and kinds. Thus a systematic arrangement of positions is needed, just as for items in the grocery store, library, or drug store.

The three points that form the basis for placing similar positions in the same group are (1) kind of work, (2) level of difficulty and responsibility, (3) qualifications required. These are the features of your job which determine the proper group or classification in which it belongs.

### (1) Kind of work

Stenographers perform a different kind of work than accounting clerks; the work of biological research scientists differs considerably from that of physical research scientists. Since the work is not similar the positions do not naturally fall in the same group. Knowing the kind of work an employee does is the first step in classifying a job. Because jobs differ not only as to kind of work, but in responsibility as well, we need to make a further grouping to get at the proper level of one research scientist's duties, for example, in relation to the level of work done by another research scientist.

### (2) Level of difficulty and responsibility

In general, work ranges from routine to responsible. Using the obvious extremes of the recent engineering graduate and the Research Branch Chief, you can see in an instant the meaning of different levels of responsibility.

It is necessary then to identify differences in level after establishing the kind of work. This gives uniform treatment in arranging positions according to similar levels of responsibility.

### (3) Qualifications required

The third feature of grouping to be considered is that of qualifications required to do the work. These are qualifications required by the job itself, not those which you might happen to have. Remember, position classification, as the term implies, is a classification of positions and not a classification of the employees occupying them. If positions were placed in classes according to the qualifications of their incumbents, all persons having the same qualifications would receive the same rate of pay regardless of the work done; thus one who performs easy and routine tasks would be paid the same as one who performs difficult and responsible tasks simply because both happen to have the same educational or experience qualifications.

When the grouping is finished all positions which are the same in kind of work, level of work, and qualifications required are in the same group and each position therein is given the same title, grade, and range of pay. Where the positions are located does not make any difference. There is equal pay for the same work. This is the key to the whole system.

Remember then, that classification is grouping positions according to---

1. Kind of work
2. Level of difficulty and responsibility
3. Qualifications required for the job

Remember, too, certain things that classification does not do---

1. Classification does not place positions in classes according to the qualifications of their incumbents. It does not consider qualifications which are merely possessed but not used or necessary in the performance of the work.
2. Classification does not recognize efficiency of the individual in determining the proper



## NASA TIROS FLIGHTS BEGIN THIRD YEAR

This month marks the beginning of the third year of successful weather satellite operations by the United States. The first Tiros satellite was launched April 1, 1960, by the NASA.

Since that time NASA has launched three more Tiros satellites. The four have transmitted back to earth well over 100,000 cloud cover photographs plus infra-red data for use in weather forecasting and analysis. This information has proved invaluable to the U. S. Weather Bureau and other users for world-wide operational weather forecasting.

Continuing improvements are being made on each Tiros and it is planned that the fifth Tiros, to be launched this spring, will be placed into an orbit which will permit a coverage of about 22 million square miles more of the earth's surface than did the first four Tiros satellites. This will be accomplished by launching the satellite northeast from Cape Canaveral and increasing the orbit inclination of the satellite from approximately 48 degrees to approximately 58 degrees. The satellite should then provide coverage of the earth in a path extending about 65 degrees north and south of the equator.

One significant feature of the increased coverage will be the ability of the satellite to view portions of the polar regions for the purpose of ice mapping.

**The Astrogram** Room 111  
Administration Building  
Phone 385

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Edited by.... Brad Wilson and Don Schilling  
Reporters.... NASA Employees

Deadline for contributions:  
Thursday between publication dates.

back. However, Mil claims the wind blew them back.



Ron Kaufmann (8- by 7-) sits amid a bevy of beauties buying tickets by the dozen from Chuck Jackson (SSFF). The interesting decor is provided by Leslie Paul (T and T), Carolyn Rizio (Contracting), Marian Gilmore and Joann Jackson (both from Library). The occasion?? The annual Spring Dance at the Hawaiian Gardens on April 28.

## Ames Airings

.....by  
Sharon Scharmen

When springtime approaches, a young man's fancy turns to thoughts of you-know-what. In the last Astrogram, we published a little article about CLARK WHITE's (SSFF) social life taking an upturn since he purchased a lovely pink Thunderbird. Now we learn that Clark and Phyllis Ames (daughter of Phil Ames (Comm.)) are planning a summer wedding. Do you suppose there is something to owning a T-Bird??!!..... GORDON TITUS (Mod. Constr.) was showing off some enticing pictures of the Delta area where he

and his wife spent several days enjoying the nice weather with a few friends. Seeing those pictures sure makes one feel like taking off for nature's playland..... BILL BREWINGTON (Struc. Fab.) and his wife recently spent an interesting couple of weeks at Port Hueneme where he was on a training cruise for the Naval reserve. During the first week-end, they were on Lawrence Welk's program, and on the return trip they stopped at San Simeon to take a tour through the Hearst Ranch. By taking the coastal route on the way home, they enjoyed some beautiful scenery..... MIL and BILL WARREN (Empl. & Avia. Shtmtl) recently returned from their annual Hesperia trip. They enjoyed themselves so much that it was pretty difficult coming

grade for a given position. The degree of efficiency with which the duties and responsibilities of a position are discharged is not a characteristic of a position but is, rather, a characteristic of the employee occupying the position at that time.

3. Classification does not prescribe what duties each incumbent shall perform. A duties classification plan describes for each class of position the duties and responsibilities which will cause individual positions to fall in that class. It is a management function to create new positions, abolish existing ones, change the character of the duties and responsibilities of any position.

Next issue will include an article on "How Does Classification Work.")



## Lt. Ellington One

### Busy Reservist



Lt. Rex Ellington, on military leave from his position as Research Engineer in the 9 x 7 Supersonic Wind Tunnel, was recalled to active duty by presidential order on October 1, 1961. He is serving as a pilot in Air Anti-Submarine Squadron 873 stationed at the Naval Air Station, Alameda, California.

VS 873 was awarded the Noel Davis Trophy in 1961 as the most efficient anti-submarine warfare squadron out of a total of sixty-nine such squadrons in the nation. The squadron is attached to Naval Air Forces Pacific Fleet and flies the Grumman S2F "Tracker". The planes can operate from land bases or carrier decks, with or without the aid of catapult. The aircraft, which folds its wings, carries a crew of four. The Trackers are equipped to detect, identify and destroy enemy submarines.

Lt. Ellington is the squadron Navigation Officer and Public Information Officer. The squadron consists of 12 aircraft and 180 men so his collateral duties keep Lt. Ellington very busy. Since recall his work day has consisted of an early morning to late at night routine. VS 873 has been flying long barrier patrols, rocket and bombing practices, mirror landing practices, ready duty patrols, instrument training and various syllabus training flights. "Don't believe what you read in the papers about recalled reservists with nothing to do," says Lt. Ellington. He has also completed nuclear orientation school, nuclear delivery school and survival school. In

## Want Ads

For sale-Single concrete tray with steel stand and double faucet. Call Dick, AX 6-7142.

For sale-Corvair, 1960. Four-door deluxe. R & H standard transmission. Dual exhaust, front grille, foldable rear seat. Excellent condition. \$1350. Call Bill Mead, RE 6-3372.

For sale-Ford, 1957, country-sedan. R & H Fordomatic, power steering, new tires. \$825. Call Bill Mead, RE 6-3372.

For sale-Baby furniture, includes crib and mattress, play pen, bathinette, jumper chair and high chair table. \$50.00 - Call CH 3-3079.

For sale-Hi-Fi, Columbia mahogany console, 4-speed changer, diamond needle, 12-inch woofer, 6-inch electrostatic tweeter. Excellent condition. \$60.00. Call CH 3-7408.

For sale-1962 Volkswagon, WW tires, 1700 miles. Warranted by manufacturer for 6000, spotless, as new - \$1700. Call Wilton DA 2-3231.

For sale-1955 Plymouth V-8, 4 door sedan, automatic transmission, power steering and brakes. Excellent condition, \$375. Call YO 8-0655.

For sale-Aluminum sportsliner canopy for 8' pickup. Also 18' vacation trailer. "Spring Clearance," will sacrifice. Call Tom Walsh AL 3-6259.

For sale-10' truck camper, used, excellent condition. \$900. Can be financed. Call YO 7-2924.

For sale-Pontiac Grand Prix, 2900 actual miles, new car guarantee, will take trade. Original price \$4500, selling for \$3800. Call SY 7-4140.

For rent-Sunnyvale, June, 1962 to June 1963, large 4-bedroom, 2 bath Eichler, completely furnished. Family room, hobby room, enclosed atrium. Large, professionally landscaped yard. Close to schools and new community swim and tennis club. \$265 per month. Call Bill Mead, RE 6-3372.

Apartment to share-2 bedroom, 2 bath apartment with pool, employed single woman age 40-50. Write Jane Wood, 3351 Alma Street, Palo Alto. \$75 per month.

Wanted-Good used playpen. Call DA 5-6051.

Wanted-Station wagon in good condition. Approximately 1950 - 1952. Prefer Chevrolet or Plymouth. Call RE 6-5393.

Wanted-Driver to join ride group, vicinity Winchester Road and Hedding, San Jose. 8 to 4:30 shift. Call Delaney ext. 372.

Wanted-Ride from vicinity of Los Padres & Homestead, Santa Clara, 7:30 to 4:00 shift. Call Jan Koinisto ext. 244.

Wanted-Ride from 10390 Wunderlich Drive (Rancho Rinconada Addition) Cupertino. 8:00 to 4:30 shift. Call ext. 415 or 252-2319 after 5:00.

If you have a piggy bank full of pennies, or a penny collection and want to sell or trade, call Ray Sargis, ext. 352. Highest prices paid.

For sale-Surfboard 9' -6" in good condition. Best offer. Call AN 6-8483 after 5 and ask for Nancie.

May and June the squadron will deploy aboard two aircraft carriers for sea duty. Lt. Ellington sends his best regards to his former colleagues.

## BOWLING

The bowling league is now well into the final third of the season. The teams are very closely grouped and almost everyone has a chance to finish out on top and challenge the previous third winners, SSFF and Mavericks.

During the last two weeks of competition, some very good individual scores were bowled, three of them high enough to qualify as tops for the league. Jean Newell, HBP had an outstanding game of 224, high game for the women; and on the same night, Lois Wilkins Wishki, turned in the highest series for the women, a 542. During the next week's bowling, Bob Sheaffer, Wishki, got the highest series for the men, a solid 618.

The league standing, as of April 5, 1962, is as follows:

	Won	Lost
Bahude	18	10
Mavericks	17	11
Wishki	17	11
Orbinauts	17	11
SSFF	16	12
Pinbusters	16	12
Striking Dynamos	15	13
Electrical	13	15
Machine Shop	13	15
EMC	13	15

## SAFETY NEWS LETTER

Ames is using more and more exotic materials for research purposes and equipments. Some of these are toxic, some flammable and a goodly number involve real hazard in the handling and machining thereof. The hazards are known to the person who orders the materials. Manufacturing and supply firms are required to properly label the materials. Unfortunately, however, the cautionary word does not always reach the man who has to work with such materials, and he may not recognize them. Be careful; don't give accidents a chance.

The two-man safety rule. The policy of Ames is always to have two men in a work area which involves a hazard. The reason is, of course, evident -- never leave a person in a situation where, should an injury occur, there is no one to help or summon help. If the work is of the one-man type of job, it is always possible to have an associate or a guard check on the worker. If the work requires more than one man, the problem solves itself. Be careful; don't give accidents a chance.



# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

# The

# Astrogram

## AMES RESEARCH CENTER, MOFFETT FIELD, CALIFORNIA

VOLUME IV

APRIL 26, 1962

NUMBER 14

### Mead Selected for Sloan Fellowship

Merrill H. Mead, Ames Technical Assistant to the Director, has been selected for a Sloan Fellowship at the Massachusetts Institute of Technology.

Sloan Fellowships are considered among the highest honors which can come to young men during their business careers. The Fellows, in their 30's, were carefully selected by M.I.T. from a group of exceptionally able executives whose employers nominated them for admission to the program because they showed marked promise of growth for major executive responsibilities.

The selected Sloan Fellows will move with their families to the Cambridge, Massachusetts, area in June, to spend twelve months at M.I.T. studying in depth the fundamentals that underlie sound management decisions. Many will complete M.I.T.'s requirements for the degree of Master of Science in Industrial Management.

"The men designated as next year's Sloan Fellows are among the most promising of our country's young executives," according to Peter P. Gil, Director of Executive Development Programs at M.I.T. "Chosen early in their careers, these men have a long future of service ahead of them."

Mr. Mead joined the Ames Research Center of the NASA in 1947 as an aeronautical research scientist, and has specialized in aerodynamic stability and control. He now heads the Apollo (manned lunar expedition program) Guidance and Control Group.

He received the Bachelor of Aeronautical Engineering degree from the University of Minnesota in 1946, and the Master of Aeronautical Engineering degree from Stanford University in 1953. He served as a commissioned officer in the U.S. Navy during World War II.

Mr. Mead will be accompanied by his wife, Carol, and their three



children: Ann, Melinda and Richard. Families of Sloan Fellows are expected to move to Boston, in order that they will come to understand and share the new viewpoints and experience which result from the year of intensive study.

### NASA to Select Additional Astronauts

Approximately five to ten additional astronauts for NASA's manned space flight program will be selected by the NASA next fall.

Experienced jet test pilots with engineering training will be screened to form the new group of spacecraft pilots to augment the present team of seven Project Mercury astronauts.

The new pilots will participate in support operations in Project Mercury and will join the present astronauts in piloting the two-man Gemini spacecraft. After Gemini

(Continued on Page 3)

### Just A Reminder !

Ames now has two telephone numbers. When calling in from outside dial YO 8-9411 for faster service. YO 7-5581 is also still in service.

### NASA Leaders Prominent in San Francisco Space Age Exposition

Top NASA officials including James E. Webb, Administrator and Dr. Smith J. DeFrance, Ames Director, have leading roles in the 5-day-long Western Space Age Industries and Engineering Exposition and Conference now in progress in San Francisco.

Mr. Webb was principal speaker at the Governor's Dinner held Tuesday evening, April 24, in the Grand Ballroom of the Fairmont Hotel. In opening the impressive program of discussions and exhibits, Mr. Webb outlined the development of this country's space efforts and pointed out the areas in which a great deal of research and problem solving still must be accomplished. He emphasized that while the West clearly has a large stake in this Country's space effort, especially in atomic power, other regions of the nation are actively seeking leadership in space technology. Western industry will be able to expand its space age capabilities only by meeting increasingly higher standards of quality, particularly in reliability and performance.

Dr. DeFrance is Chairman of the NASA team presentation scheduled for Friday, April 27, at San Francisco's Cow Palace. Included in the program will be "The NASA Space Program" by DeMarquis D. Wyatt, Director, Office of Programs; "Manned Space Flight" by John H. Disher, Assistant Director for Apollo Spacecraft Development; "NASA Requirements for Reliability and Quality" by Dr. Landis S. Gephart, Director, Reliability and Quality Assurance; and "NASA Procurement Policies" by Ernest W. Brackett, Director, Procurement and Supply.



## Recreation Roundup

....by Vicki Malatesta

FLASH....THE DATE OF THE AMES SOIREE HAS BEEN CHANGED to Friday evening, May 4, from 7 - 11 p.m. It seems that too many Ames employees are busy on Saturdays, hence the change in time and date. The hobbies are inspiring and some lucky family will take home the beautiful landscape by Tony Quartuccio.

NEWLY ELECTED OFFICERS OF THE STAMP AND COIN CLUB are Bob George, President, and Gene Lyman, Secretary-Treasurer. Meetings are held the first and third Fridays of each month at 7:30 p.m. in the Ames Cafeteria. The business meeting is followed by an exhibit by one of the members, and there is a door prize given away, too. After plenty of time to talk and trade coins and stamps, the club joins the Bridge Club for refreshments and stimulating conversation. Newcomers and novices are urged to come out and be introduced to this exciting and educational pastime.

FRIDAY, APRIL 20 BRIDGE WINNERS WERE Dwight Moody and Bob Spalding, first; Ron Kauffman and Alan Levin, second; Layton Yee and Harry Bailey, third; and Pat Moody and June Spalding fourth. Remember, May 4 is Master Point Night, but we must have six tables this Friday night (April 27) to qualify. See you there!

HOW WOULD YOU LIKE TO SAVE \$200 ON A ROUND-TRIP FLIGHT TO PARIS? If the Ames Recreation Committee can get 25 adventurers together--we can "Jet" to Europe for approximately \$550 each. Best time to go will be September. For more details call Ralph Igler (RFE), ext. 309.

BASEBALL TIME AGAIN AND JIM PATTERSON HAS TICKETS available for the following games at Candlestick Park, San Francisco:

Sunday	May 20	Houston (Doubleheader)	10:30 a.m.
Friday	June 15	St. Louis	8:15 p.m.
Wednesday	July 4	New York (Doubleheader)	10:30 a.m.
Sunday	August 12	Los Angeles	1:00 p.m.
Sunday	September 9	Chicago	1:00 p.m.

Round trip transportation and reserved seat at the game, \$4.40 per person. Call Patterson at ext. 293 for reservations and further information.

PLANS FOR THE FORMATION OF AN AMES CHORAL GROUP are now in the making. Membership would be open to all Ames personnel with or without formal training in voice or chorus work. Organizational meeting will be held at noon, May 2 in the Cafeteria dining room. Persons interested in getting this activity started on a firm basis are urged to attend. Bring your lunch!

### POISONOUS PLANTS

Do you know how many plants in your garden carry a lethal dose of poison?

According to one pharmacologist, there are more than 100 cultivated North American plants that range from mildly toxic to deadly. In one seed catalogue he counted 54 harmful specimens.

There is enough poison in a packet of castor bean seeds to kill five children, he says. One tulip bulb contains enough to kill an adult. Those lovely sweet peas

secrete in their stems a poison that causes a form of paralysis, seldom fatal but disabling for months.

Honey made by bees that have been tapping rhododendron and mountain laurel flowers has been found poisonous. The potato has wholesome tubers but its leaves will poison anything but a potato bug.

However, we needn't banish beauty from our gardens because some plants contain poison. But we should impress youngsters with the dangers of putting leaves and stems of plants in their mouths

## Golf Notes

.....by  
Ruth Richardson

The Ames Golf Club met on April 14 at the Aptos Beach Golf Club for its monthly tournament. Play for the day was a best-ball foursome.

First place went to the team of Feo Corsini, Ted Smith, Gary Bowman and Vincent Bellomo with a net 54. Second place team was composed of Roy Griffin, Debby DeBevoise, Jack Wyss and Jim Silver with a net of 55. Third place team was Bob Nysmith, John Rakich, Sam Pitts and Russ Fahey netting 56.

"Nearest the pin" prizes went to Larry Graham in Class A and Carol Tinling in Class B.

Several matches were played in the current match play tournament. All first matches must be played by May 14.

The next tournament will be played May 19 at the Riverside Golf Course.

## Want Ads

For sale - Argus 300 slide projector, 4 inch lens, like new. \$20.00. Call David Fisher AL 2-8358.

For sale - Three speed RCA record player (table model) diamond needle, excellent condition. \$25.00. Call DA 1-3674.

For sale - Toy Dachshund puppies, 10 weeks old, championship stock, AKC registered. Call DA 3-0194.

For sale - Differential housing for 1949-1951 Dodge pick-up. Call Dick AX 6-7142.

For sale - Argus C3 - 35 mm color camera with case, flash attachment, lens shade and exposure meter, good condition. \$30.00. Call Jim Lowe AN 9-4606.

For sale - Eastern built, 18' vacation trailer, self-contained toilet and ice box, standard equipment, like new. \$995. Call CH 3-5826.

Wanted - Used electric stove in good condition. Call RE 9-6728.

For sale - 12' Cartop boat, factory built, light plywood construction, 180 lbs., special cartop carrier, easy one man loading. \$85.00. Call T. Gregory, AL 2-2858.

For sale - Girl's 26-inch Hawthorne bike. \$12.00. Call CY 7-4532.

For sale - Now available for display purposes American Flags, 3 x 5', 50 stars, with 6 foot pole and mounting bracket. \$3.00 each. Call Marty Margolis - YO 7-6120.

For sale - 58 Ford Fairlane "500" hardtop coupe, big 352 cubic inch engine, radio, heater, automatic transmission, power steering and brakes. \$1100. Call DA 1-2264.

Ride wanted - Los Angeles or vicinity on weekends. Call CH 5-1158.

Young woman wanted to share home with same. Located in Sunnyvale close to Ames. Room & Board, \$85 per month. Call RE 9-0773 after 3:00 p.m.





Interested in

# UNUSUAL HOBBIES?

Not since the Spring of '59 has there been such a vast array of Ames Talent!

## Soiree'-MACH III

HOBBIES UNLIMITED!! Slides, models, arts & crafts and many, many others... For the whole family (NO CHARGE FOR CHILDREN UNDER 16) - about 75 Ames exhibitors to talk about HOBBY LIVING. Get your tickets early...

Adults .50 - children free) Ames Auditorium... MAY 4th, 7 to 11 P.M.  
Ticket chairman: BOB GEORGE, Ext 224





## Auditorium Displays

Fire Arms . . . . .	A-1	Sid Copeland
Stock Market Analysis . . . . .	A-2	Dan Kirk, Roger Craig and John Paterson
Photographic Arts . . . . .	A-3	Emmett Fry, Hugh LeGros and Jim Chloupek
Orchid Culture . . . . .	A-4	Annette Bratlein and Lysle Minden
Cameo Carving . . . . .	A-5	Ray Addison
Artist Colony . . . . .	A-6	Bill Ward, Anthony Quartuccio Earl Olson, John Foster and Otis Strong
Astronomy . . . . .	A-7	John Delaney, Duane Dugan, Roy Griffin, Clara Williams and Ed Kelley, Jr.

## Outside Displays

Race Car . . . . .	0-1	John Harmon
Model Car and Camper. Kitchen	0-2	Bob Eglington
Antique Car . . . . .	0-3	Ralph Igler



## Cafeteria Displays

Handcraft Jewelry . . . . .	C-1	James Karabas and Bud Camacho
Handcraft Jewelry . . . . .	C-2	Ben Mayo
Ceramics . . . . .	C-3	Iola Hogan
Mosaics . . . . .	C-4	Herb Pankratz
Model Engines . . . . .	C-5	G. W. Graham
Stamps . . . . .	C-6	Bob George and Margaret Krumm
Match Covers . . . . .	C-7	Richard Tate
Violin Making . . . . .	C-8	R. T. Jones
Plastic Arts . . . . .	C-9	Al Clarke
Wood Carving . . . . .	C-10	Victor Hugo

## Color Slide Show

Edward Kelley, Jr.  
Ted Smith  
Jack Mellenthin  
Jim Fitzgerald  
Allen Weber

Ken Green  
Vern Gnos  
Jim Monfort  
Jessie Gaspar  
Horace Emerson  
Emerson Shaw



DOOR PRIZE DRAWING AT 10:00 P. M.



This original oil landscape by Tony Quartuccio (Transportation) will be given as a door prize this evening to some lucky spectator or exhibitor. Tony is just one of the fine Ames artists who have banded together in the Auditorium to form an "Artist Colony" Soiree style.

## Program Committee

### GENERAL CHAIRMAN

Hy M. Zimmer

### AUDITORIUM BOOTHS

Richard Johns

### RECEPTION

Vicki Malatesta

### COLOR SLIDE SHOW

Ronald Kauffman

### ELECTRICAL AND OUTSIDE BOOTHS

Burt Skow

### CAFETERIA BOOTHS

Charles Jackson

### TICKET SALES

Bob George

### SLIDE SHOW RESERVATIONS

Vicki Malatesta



# Personnel-ly Speaking

## HOW DOES CLASSIFICATION WORK?

Three main parts are involved in operating the system (1) setting standards, (2) fixing and describing the work assignment, (3) weighing the assignment.

### (1) Setting standards:

Without standards jobs cannot be measured with any degree of consistency. Therefore, a "blueprint" (called a standard) is prepared setting forth the different points which must be considered in measuring a particular type of job. It explains in detail the kind of work, the different levels of work, the qualifications required for each level, and the grade level of each position with the official title.

### (2) Fixing and describing the work assignment:

The emphasis in this part of the operation is on the work assignment. The description is chiefly a device for recording the work assignment. The work assignment itself is the important thing to be measured.

(3) Weighing or balancing the assignment against the proper standard is the third important step. Once the work assignment has been fixed, it is compared with or measured against the standard to find its proper grade and title.

## USES OF POSITION CLASSIFICATION

Some of the things that a position classification plan does to achieve the purpose of facilitating all phases of personnel administration are:

### (1) It establishes a sound basis for providing equitable pay for the work to be done and for providing that pay in an equitable manner.

In order to put into effect the principle of "equal pay for equal work" a position classification plan determines what work is "equal." Under the same employment conditions, one pay scale can be established for a class of positions with the assurance that if it is right for the whole class of positions, it is right for each individual position within the class. Ranking sequence of classes permits the association of higher pay scales with higher work and the lower pay scales with less exacting work.

### (2) It serves as a basis for recruiting and testing.

Because position classification supplies an orderly arrangement of facts about the duties, responsibilities, and qualification standards of positions, it forms the basis for planning and preparing tests, informing prospective applicants or other interested persons about the duties of positions to be filled.

### (3) It serves as a starting point for developing employee training programs.

Before employees can be trained, the work for which they are to be trained must be described and analyzed, the necessary knowledges and abilities deduced, and selection from among them made to serve as a basis for the training program.

## ASTRONAUTS...

Continued from Page 1)

lights some of these pilots may act as spacecraft commanders on Apollo missions.

Here is the timetable for the selection:

Applications from any individual meeting the qualifications will be accepted by the Director of the Manned Spacecraft Center, Houston, Texas, until June 1, 1962. The aircraft industry, military services and other government agencies will be requested to recommend pilots best qualified for this work.

In July pilots meeting the qualifications will be interviewed and given written examinations on their

engineering and scientific knowledge.

After that screening, selected applicants will be given a thorough physical examination by a group of medical specialist.

Final selection will be made in the Fall 1962.

Five qualifications are established for applicants:

1. The candidate must be an experienced jet test pilot and preferably be presently engaged in flying high performance aircraft.

2. He must have attained experimental flight test status through the military services, the aircraft industry or NASA or must have graduated from a military test pilot school.

3. He must have earned a degree in the physical or biological sciences or in engineering.

4. He must be a United States citizen, under 35 years of age at the time of selection, and six feet or less in height.

5. He must be recommended by his present organization.

The  
**Astrogram**

Room 111  
Administration Building  
Phone 385

The Astrogram is an official publication of the Ames Research Center, NASA, Moffett Field, California, and is published bi-weekly in the interest of Ames employees.

Edited by....Brad Wilson and Don Schilling.  
Reporters....NASA Employees

Deadline for contributions:  
Thursday between publication dates.



## Spacecraft Habitability Study Conducted at Ames

At noon on Friday, April 6 Ames research pilot Glen W. Stinnett, 33, and physiologist Dr. Terrence A. Rogers, 37, of Stanford University, emerged from a seven-day confinement in a simulated lunar spacecraft. In a crew capsule similar to those to be used on NASA Projects Apollo and Gemini, the experiment was conducted to investigate the performance capabilities of a two-man crew in a minimum work space condition during a seven-day flight mission.

Special psychological and physiological tests on the two subjects have been made, in addition to the reduction and analysis of the data acquired during the confinement period. The new information obtained will be of major importance in designing crew quarters and facilities for manned spacecraft for lunar and other space flights.

Sealed off from "earth" at the Ames Research Center at noon on March 30, the two-man study was unique in that professional personnel were used to conduct continuous and realistic tasks while under confined space flight conditions.

Alternating on a four-hour-on and a four-hour-off work and sleep-rest schedule, the crew was presented with emergency conditions--such as loss of electronic and communications facilities--which required their immediate action. The accuracy of these actions and the reaction times were then measured and evaluated.

The most realistic test was the simulation of an emergency navigation problem conducted manually following a failure of the automatic navigating system. The test consisted of taking pictures of an earth image projected against a



Glen W. Stinnett has specialized in research flying since coming to Ames in 1955. Born on October 29, 1928, in Bryan, Texas, he served as a Navy pilot during the Korean conflict and later received the Bachelor of Science degree from the University of Washington in 1955. He possesses a commercial pilot's license and is a member of the Institute of Aerospace Sciences.

star and sky background, and performing data calculations to make necessary changes in spacecraft velocity in order to return to the proper re-entry flight path.

At the conclusion of the mission, it was determined that Mr. Stinnett and Dr. Rogers had "navigated" with an accuracy that would have assured them a safe re-entry into the earth's atmosphere and a landing within geographical acceptable limits.

Numerous physiological studies were conducted, including an electrocardiogram (heart beat) of each crew member monitored on an os-



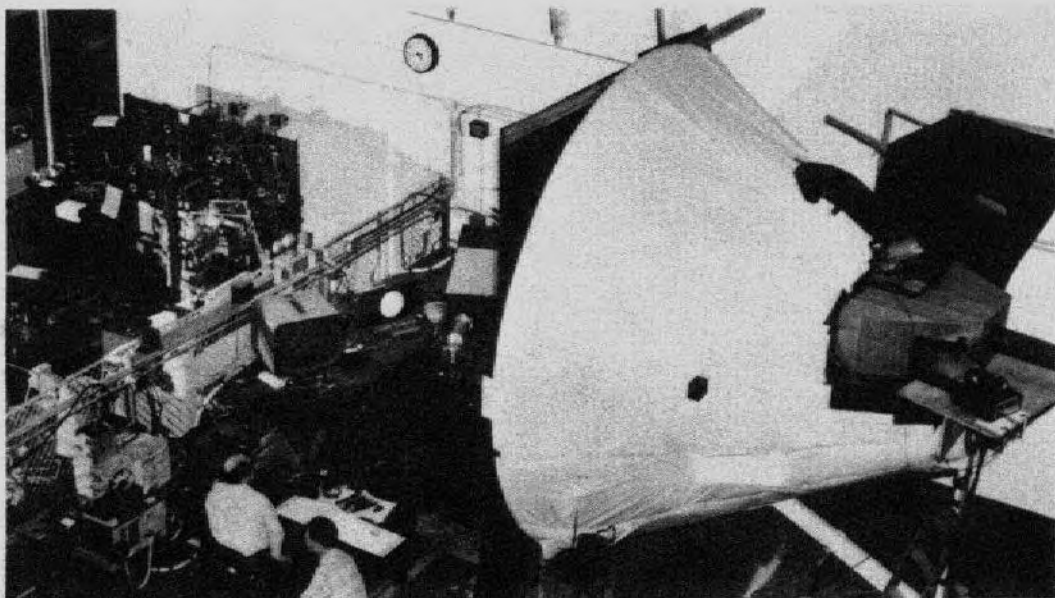
Terrence A. Rogers is Assistant Professor of Physiology in the Department of Physiology, Stanford University School of Medicine. He received his Bachelor's degree from the University of British Columbia in 1952 and his PhD degree from the University of California at Davis in 1955. After serving as an aerial navigator in the British Royal Navy in WW II, he completed his education and was an instructor in the University of Rochester School of Medicine before joining the Stanford Medical School staff.

cilloscope and recorded on tape.

An analysis of the crew's respiratory functions was also conducted daily, permitting a study of total ventilation in the capsule and calculations of the oxygen consumption and carbon dioxide output of the crew members. This also provided for metabolic rate measurements.

Other physiological studies included: 1) water and salt requirements and other body chemistry functions; 2) human waste analyses; 3) blood pressure; and 4) body temperature.

Psychological tests were also performed throughout the seven-day confinement study, which included: 1) rate estimation, designed to investigate changes in the perception of the passage of time; 2) vigilance, to measure decreasing reaction abilities and willingness to perform relatively simple tasks; 3) pattern recognition, to investigate the crew members' abilities to recognize differences in visual patterns; 4) cancellation test, to test human channel capacity in data processing; 5) tracking test, to investigate the deterioration of body motor performance; and 6) navigation and other emergency checks.





# The Astrogram

AMES RESEARCH CENTER, MOFFETT FIELD, CALIFORNIA

VOLUME IV

MAY 10, 1962

NUMBER 15

## Dr. Dryden Presented Langley Gold Medal



Dr. Hugh L. Dryden, Deputy Administrator of NASA, was awarded the Langley Gold Medal of the Smithsonian Institution at ceremonies held April 27 in Philadelphia. Presentation of the medal was made at the annual meeting of the American Philosophical Society, America's oldest scientific and academic society founded in 1743 by Benjamin Franklin.

The Langley Medal is awarded for "specially meritorious investigations in connection with the science of aerodynamics and its application to aviation," as determined by the Board of Regents of the Smithsonian Institution. Dr. Dryden was cited in recognition of his important applications of experimental science to the problems of flight and for his wise and courageous administration of much of America's research and technical developments that now make possible the conquest of air and space."

Named for Samuel Pierpont Langley, aviation pioneer and Secretary of the Smithsonian

(Continued on Page 4)

## NASA Appoints New Director for Advanced Research

The appointment of Dr. Raymond L. Bisplinghoff, Professor of Aeronautical Engineering at the Massachusetts Institute of Technology, as Director of the NASA Office of Advanced Research and Technology (OART), was announced by NASA Headquarters last Thursday, May 3.

Dr. Bisplinghoff, 45, succeeds Ira H. Abbott, who retired in January. Since Mr. Abbott's

retirement, Thomas F. Dixon, Deputy Associate Administrator of the agency, has been acting director of OART.

Dr. Bisplinghoff will assume his new duties in July. "We feel very fortunate in this appointment," Dr. Robert C. Seamans, NASA Associate Administrator, said. "Dr. Bisplinghoff's experience includes many years in aeronautical and space research, a long

(Continued on Page 2)



PRESENTATION OF PATENT AWARD .... Dr. Smith J. DeFrance (left), Director, presented a patent award certificate to Grant W. Coon (center), Measurements Research Branch, at ceremonies held recently. James A. White (right), Chief of the Instrumentation Division is an interested observer. The patent certificate was awarded for a diaphragm-type of capacitance transducer and is used in a survey probe in the dynamic testing of aircraft and missile components. A 15-year employee of Ames Research Center, Mr. Coon has long been interested in developing ideas that pertain to his work. He said that the ideas come easy but working them out takes time. This is the second patent granted to him and he has four patent applications pending.

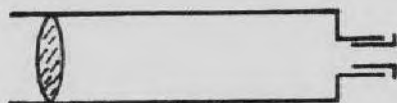


## Astroventuring... ★ with walt krumm

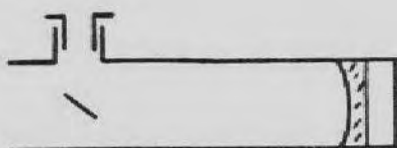
### THE SMALL TELESCOPE

Many questions regarding the small telescope and its use keep arising. The very simplicity of some of these questions precludes their general publication and yet they are important to the amateur. To find the other answers one must search through many books. We will attempt to catch up on a few of these in Astrogram articles.

There are two kinds of telescopes — refracting and reflecting, plus some combinations.



REFRACTING



REFLECTING

They are rated by the clear diameter of the objective (either lens or mirror). The larger the aperture the more powerful the telescope. The least effective diameter for the amateur astronomer appears to be 3-inch refractors and 6-inch reflectors. But do not let this be a fast rule, for the smaller instruments have their place.

A telescope is used for two reasons; to increase the amount of light brought into the eye, and to increase the apparent size of the object being viewed. The first is by far the most important to the amateur — the light gathering ability of the instrument — as it allows him to see hundreds of things far too dim to be seen by the naked eye. The second — magnification — is used in viewing the moon, planets, and occasionally double stars. Mass advertising by manufacturers of magnifications obtainable for their instruments is misleading. It is true that you can get 160 to 200 power from a 2-inch lens, but what good does that do? Only in the case of the planets where light gathering ability and magnification go hand-in-hand does magnification help. And even then the two are balanced together rather than using maximum magnification. The old argument of which is

### First Report on Fund Drive

The first report of donations to the combined Health Agencies-Federal Service Joint Crusade solicitation has been received by Ed Schnitker (Budget), Chairman of the Ames Givers Fund.

Funds totalling \$535.75 from 202 contributors were donated to the Federal Joint Crusade agencies. This is an increase of approximately 30 per cent over the 1961 total of \$392.75. The report from the Voluntary Health Agencies has not been received as of this date.

Three specific programs will receive the funds, with undesignated contributions divided equally among the three. They are:

CARE	\$323.93
Radio Free Europe	123.93
American-Korean Foundation	87.89

In submitting his report, C. Thomas Perry, representative for the Federal Joint Crusade said, "Please convey to your Director and your personnel our thanks for their participation and help in making the 1962 Joint Crusade campaign a real success."

better, refractor or reflector, will have to be solved by someone more knowing than the Astroventurer. But check on the person's prejudices before accepting his arguments. The refractor is usually purchased because of the necessity of producing the four surfaces of the lens rather than the single surface of the mirror. This limits the size of the instrument for the amateur from the cost standpoint, so amateur refractors are usually small. Because a moderately large mirror can be made by the skillful amateur, he can achieve a 12½-inch or 16-inch mirror before the cost goes skyrocketing, and these are close to the professional size.

One needs a telescope that will do everything moderately well for his first instrument. With this he can start his hobby and delve into each part of the science until his interest leads him to one line of endeavor. Then he can select the type of telescope to fit his needs for a second instrument. The rule-of-thumb suggests a 6-inch Newtonian reflector because it is inexpensive and easy to build.

## Ames Airings

.....by  
Sharon Scharmen

ANDREW F. CRACOLICE formerly of the Maintenance Group and Instrument Division, who later transferred to the RFEE Branch stock room, retired April 30, 1962. Eighty-three friends attended a luncheon at Rupe's Restaurant in Mt. View in his honor on April 27. Several speeches were given, and a poem was written by Joe Auby for the occasion. Andy plans to become office manager for his son's real estate office in Cupertino. All of his friends wish him the very best of luck.... Diaper services will be busy taking care of the following new Ames babies: James Franklin born to HERBERT LAWSON (FSS) and his wife on April 15, weighing 7 lbs., 2 oz.; Kimberly Lois born to DICK TUSH (8x7) and wife on April 28, weighing in at 5 lbs, 13 oz.; and Kenneth Robert born to ROBERT NYSMITH (HBR) and his wife on April 28, weighing 9 lbs, 4 oz. .... JEANNE and JOSEPH NICKERSON (Adm. and Acctg) enjoyed a week in the mountains with their son recently during Easter vacation. Jeanne, however, returned home only to catch the measles, of all things. .... VIRGINIA DICKENS (Fiscal) and her husband, Robert, are visiting in Denver, Colorado to celebrate the 79th birthday of her mother. While there, they will visit other relatives and friends, and hope to see snow in the Rockies.

### DR. BISPLINGHOFF (Continued from Page 1)

association with the Department of Defense, NASA and its predecessor, the National Advisory Committee for Aeronautics. In addition, he has a strong background in industry and education and has supervised a wide variety of research programs."

The Office of Advanced Research and Technology is one of four major NASA program offices. OART is responsible for conducting aeronautical and space research necessary to accomplish long-range objectives.

Dr. Bisplinghoff has been at MIT for 16 years, the last ten as Professor of Aeronautical Engineering. He also has served as consultant to more than a dozen industrial firms and has been a member of Department of Defense and NACA committees.



# Personnel-ly Speaking

## AMES MERIT PROMOTION PLAN

### I BASIC POLICY

It is the policy of the Ames Research Center to fill each position with the best qualified available person. A vacancy which represents a promotional opportunity for one or more Ames employees will be filled by the placement of the best qualified employee available, provided his personal qualifications, training, and experience are at least equal to those of applicants from other sources.

The choice of a staff member to serve as an understudy, or to be temporarily assigned to a higher level position, is a specific administrative selection which in many cases can reasonably be expected to lead to promotion. Similarly the reassignment of an employee to another line of work or his transfer to another organizational segment can often be identified as an action placing him in the position to assume higher level duties leading to promotion. The assignment of an individual to head up a major subdivision of a branch involving the immediate supervision of subordinate project leaders is regarded as placing him in a work situation leading to promotion, even though the subdivision may not be an officially recognized organizational entity. Any such selections should be made in the same manner and in consideration of the same principles as if the promotion were immediate.

Employees will be given an opportunity individually and/or through officers of organized employee groups, to advise and assist in major revisions of this promotion plan.

There shall be no discrimination among candidates because of race, color, religion, or national origin.

(Next issue: Part II, "Coverage")

## Recreation Roundup

.....by Vicki Malatesta

**EXTRA!...NEWSFLASH FROM THE FRIDAY NIGHT SOIREE'.....** Winner of the oil landscape by Tony Quartuccio (Transportation) was Betty Brady (11-Foot)...The hobby show was the best we've had yet, with interesting displays and an excellent crowd. Look for this as an annual affair.

**IT'S BAR-B-QUE TIME AGAIN!** Make a note on your social calendar **NOW** for the Ames Annual Bar-B-Que to be held Saturday, June 2, at Blackberry Farm in Cupertino. If the location is new to you, get a map when you buy your ticket. It's no fun getting lost, especially when you are on the way to a day of swimming, horseback riding, games (for the entire family), plus food prepared by your fellow employees.

The menu:

Steak.....	\$2.50 (complete dinner)
Chicken.....	\$1.75 (complete dinner)
Steakburgers.....	\$1.00 (complete dinner)
(for children)	

Prices include table reservation, entrance fee to Blackberry Farm, and the use of facilities and the planned recreation.

**THE AMES CHORAL GROUP IS READY** for the first rehearsal on May 16, from 12 noon to 12:30, in the basement of the Instrument Research Laboratory. Bring your lunch - Bill Houck, chorus director, and Frank Cota have promised free coffee and doughnuts. Membership is open to all Ames personnel with or without formal voice training. If you have any questions call Bill or Frank on ext. 230.

**THE BRIDGE CLUB'S** second monthly master point event was held Friday, May 4. The North-South winners were: Art and Jimmy Kaskey, first; Jack and Barbara Tunnell and Alan Levin and Bob Merrick tied for second. East-West winners were: Jim and Marilyn Raby, first; Lu Cicolani and George Callas, second; Ed and Marjorie Collins and Tom Walsh and George Lee, third (tied). The winners of the Friday, April 27th play were: Pat Moody and June Spaulding, first; Ron Kauffman and Alan Levin, second. We need more bridge players. Call Art Kaskey, ext. 224 or Ron Kauffman, ext. 252 for details.

### TOP LOCAL SCIENCE STUDENTS TOUR AMES

Eighty-three top science students from San Mateo County high schools were given a first hand look at Ames facilities on Friday, April 27.

Skip Fletcher (8- by 7-), John Viegas (Heat Transfer), and Dean Schallen (Research Equipment Engineering), were guides for the two-hour-long tour. Speakers at the facilities visited were Gerald Mitvalsky and Henry Woodward, (Hypervelocity Ballistic Range); Charles Steinmetz and Don Dust (AFS); Preston Nelms (8- by 7-); and Frank Lawson (FSS).

### NASA EMPLOYEES SPONSOR 30-DAY TOUR OF EUROPE

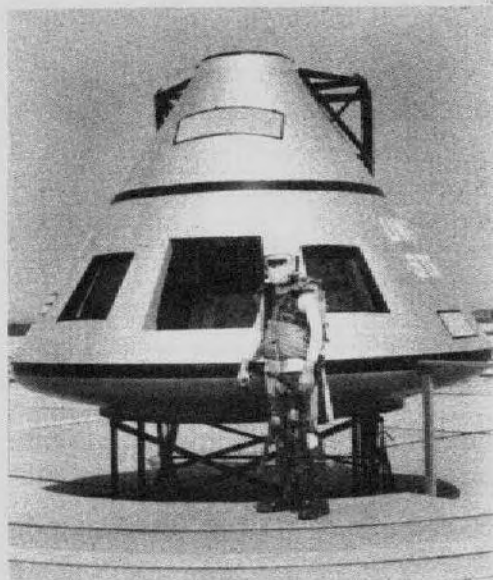
The NASA Employees Club is again sponsoring a 30-day all-expense tour of Europe, September 24 to October 24. In addition, the Club is offering a 30-day tour of Spain and Portugal.

Cost of the trip will run from \$875 to \$880 per person. The price includes transatlantic air transportation and land arrangements. For those wishing to take the charter flight only, the round-trip fare is \$300 per person.

Contact the Astrogram office, Room 109 or telephone ext. 385 for copies of the detailed itinerary and reservation information.



## NAS Moffett Field "Open House" Announced



Armed Forces Day 1962 will be observed at Moffett Field with "open-house" activities at the Naval Air Station on Saturday, May 19, from 9 a.m. to 4 p.m.

The day-long celebration will pay tribute to the men and women of our uniformed forces and will afford visitors an opportunity to learn first-hand of the mission and activities of Moffett Field.

A highlight of the exhibits and static displays will be the NASA Apollo capsule constructed

at Ames Research Center. A wooden mockup of the three-man orbital capsule scheduled to be launched by the U. S. in 1967, it is complete with three seats, a bed, three windows and a detailed control panel. Standing 16 feet high and measuring 12 feet across, visitors will have little trouble finding it in the exhibit area.

According to Moffett Armed Forces Day officials no air show has been planned this year. But Navy fliers will meet their normal Saturday flying schedules.

A cordial invitation has been extended to all Ames employees their families and friends to attend the "open-house." The full program of events assures something of interest for all.

## Want Ads

For sale - 1951 Plymouth, 4 door, radio and heater, new paint, new tires. Runs well. Call Bob Coate AL 3-7945.

For sale - 1961 Chevrolet convertible, 9 months old. \$2700. Call Genevieve Saunders 591-0841.

For sale - GI SACRIFICE - Moving to Langley. Immaculate 2 year old house, Cupertino area. 3 bedrooms, 2 baths, electric kitchen with dishwasher and garbage disposal, insulated, landscaped, drapes included. 2 car garage. Owner asking \$17,950. Assume GI loan. Call AL 2-8618. 7533 Bollinger, San Jose.

For sale - Large size ice chest, almost new. Ideal for camping or picnics. \$25 value for \$10. Call DA 3-0890 after 5 p.m.

For sale - Men's Spaulding golf clubs, 1 and 3 woods, 3, 5, 7 and 9 irons, plus bag. Call M. Warren AX 6-2794.

For sale - Dining-room set, mahogany. Including 54" x 36" table, two 9-inch leaves, custom made table pad, 6 padded chairs. Call Quigley RE 9-2913.

Wanted - Used set of electric trains, with or without accessories - should have transformer. Call SY 7-4371.

Wanted - Any information leading to summer employment for 18 year old. Male, outstanding high school academic record, entering college in fall. Call YO 7-3027.

Wanted - to join or form ride group. Vicinity Stelling and McClellan, Cupertino. 8 to 4:30 shift. Call Frank Lawson ext. 433.

For sale - 3 bedroom 2 bath home in quiet residential area of Cupertino. Patio with cover, drapes, carpeting. \$18,500. Call AL 3-6294.

**The Astrogram** Room 111  
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## NASA Space Exhibit Featured at World's Fair

World-wide attention is focused on Seattle now that the Century 21 Exposition (Seattle World's Fair) is officially open. Completed ahead of schedule and ready to go on opening day was NASA's exhibit, "Space for the Benefit of Mankind."

The NASA exhibit, housed in its own building and covering some 20,000 sq. ft., presents the U. S. program on the peaceful uses of outer space. Here may be seen our scientific accomplishments, additions to our store of basic knowledge, how our progress has been shared with the world, practical applications in our daily lives, and what space may have in store for man in the future.

Manager of the NASA exhibit for the run of the Fair is Ames employee Harry De Voto (REE). His selection by NASA for this special assignment is the result of more than 16 years of being involved in major exhibits that have included such varied activities as the Triennial inspections, recruiting drives and manager of the trailer-mounted 80 foot SCOUT model.

A task force of scientists, public affairs specialists, and 50 engineering students from the University of Washington will be on hand to help man the exhibit. No conducted tours are planned for the visitors, according to De Voto, but the task force will filter through the area to help answer questions. "We want to keep it alive, keep it interesting," De Voto said, "Who knows, we may have a potential Ames employee in the crowd!"

The NASA Exhibit will include (a) Lobby and Introductory Areas; (b) Technical Display Areas; (c) Technical Film showings and (d) Spacemobile (space science demonstrations).

Fair-goers looking for the NASA Exhibit will find it occupying Building 9 at the Century 21 grounds - located next to the Century 21 Theme Building. Hours of the Exposition operation are from 10 a.m. to 10 p.m., seven days a week. Closing date is October 21, 1962.

### DR. DRYDEN...

(Continued from Page 1)

Institution from 1887 to 1906, the medal has previously been awarded only nine times in the 54 years since its establishment. It was first given to the Wright brothers in 1909. The other recipients have been Glenn H. Curtiss, Gustave Eiffel, Charles A. Lindberg, Charles M. Manly, Richard E. Byrd, Joseph S. Ames, Jerome C. Hunsaker and Robert H. Goddard.

Dr. Dryden currently holds a number of posts in addition to his responsibilities for the U.S. civilian space program under NASA. He is a member of several scientific committees advising Government agencies including the military services, and is Alternate Representative of the United States to the United Nations Committee on the Peaceful Use of Outer Space. The Deputy Administrator has been highly honored for his leadership of research and development associated with aeronautics and astronautics, and has written over 100 articles on aeronautical space research.



# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

# The

# Astrogram

## AMES RESEARCH CENTER, MOFFETT FIELD, CALIFORNIA

VOLUME IV

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NUMBER 16

### Allen Guest Speaker at Joint ARS- IAS Meeting



H. Julian Allen, Assistant Director, was guest speaker at a joint meeting of the American Rocket Society and the Institute of Aerospace Sciences, held at the Caravan Inn, Mountain View, last Tuesday evening (May 22).

One of the nation's most renowned aerospace scientists and the originator of the blunt shapes now standard for atmospheric entry, Mr. Allen chose as his subject "Hypersonic Aerodynamic Problems of the Future", from a paper which he presented before the Fluid Mechanics Panel at the annual meeting of the Advisory Group for Aeronautical Research and Development in Brussels, Belgium, early last month.

"Hypersonic Aerodynamic Problems of the Future" discusses such aspects of hypersonic atmosphere entry as the use of slender shapes to avoid excess heating by air radiation, the combination of retrorocket and aerodynamic braking for economy, the need for continued experimental research in the complex analytical approaches to hypersonic entry and the utilization of meteor tracking data to provide useful

### Ames Employees Meet with NASA Personnel Director



NASA HEADQUARTERS VISITOR, Robert J. Lacklen (seated at head of table), NASA Director of Personnel, recently met here with supervisors and a representative group of Ames employees to discuss the NASA Employee-Management Cooperation Program. A more detailed explanation of the policies, regulations, and procedures governing the program will be forthcoming in the Personnel-ly Speaking column of the Astrogram.

### George Holden to Take Part in SPIE Conference

The first annual Northern California Conference of the Society of Photo-optical Instrumentation Engineers (SPIE) will be held Monday and Tuesday, June 4 and 5, at Rickey's Studio Inn, Palo Alto. Guest speaker at the luncheon on Tuesday will be George B. Holden, Human

aerodynamic heating information.

According to George Edwards, program chairman for the affair, this is the last meeting of the season and perhaps the last before the membership is asked to vote on a merger of the two technical societies.

Performance Requirements Branch. He will present a paper on the Photographic Techniques Used in Biotechnology Research. In addition, a film showing Astronauts Glenn and Shepard in a centrifuge will be a part of his program.

Exhibitors for the two-day conference include local industries interested in the optics field. An invitation is extended to all persons interested in cameras, optics, processors, electronics, emulsions, and data assessment to attend the conference. The time is 12 noon to 10 p.m. on June 4, and 9 a.m. to 9 p.m. on June 5.



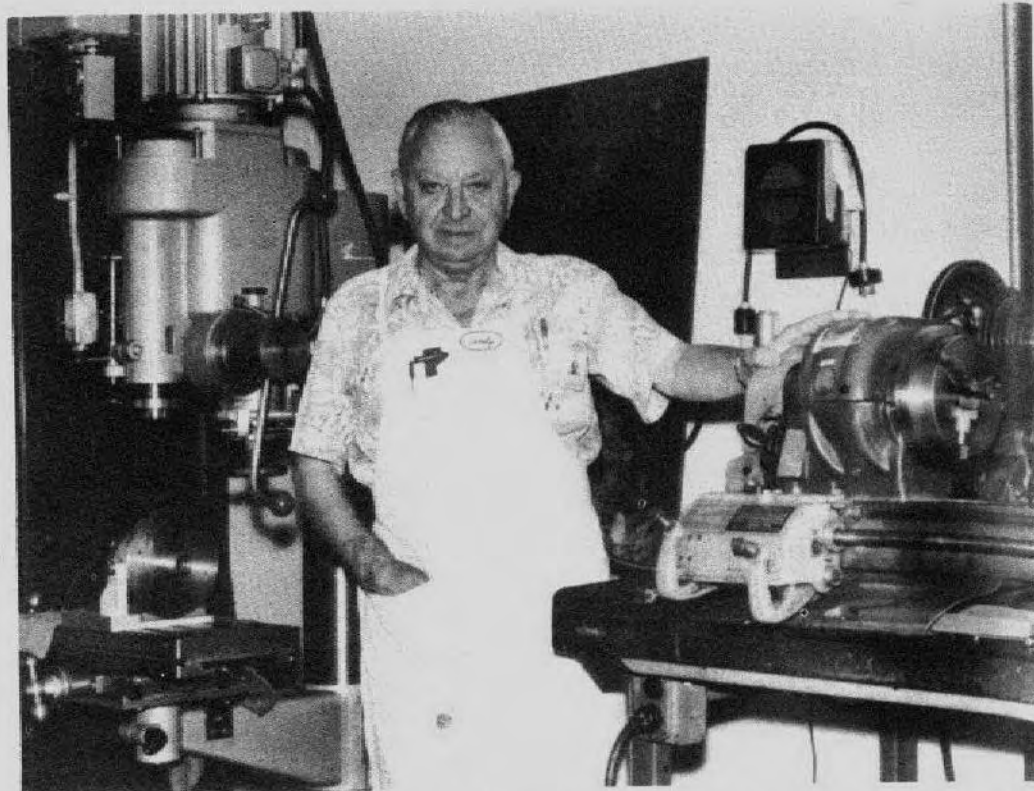
## ANDREW GALATIAN TO RETIRE FROM AMES ON MAY 31

Dirigibles, submarine chasers, and the complexities of a 6-by-6-supersonic wind tunnel, all became a part of the present as "Andy" Galatian (6-by-6-) reminisced on the eve of his retirement set for May 31.

"I got old too soon and smart too late," said Andy. But this modest statement couldn't hide the fact that over the years this veteran mechanic has turned out precision work that fully reflects his deep interest and respect for the many accomplishments at Ames.

In recalling some of the highlights of his long career Andy spoke of his days with the Navy during World War I. "My sea duty was submarine chasing with the 'Splinter Fleet' — ships built with a wooden hull that could be turned out in a hurry. They sure were rough-riding broncos, but we needed them fast and wood was the answer." When World War II came he was chasing subs again, this time with blimps.

The world of the rigid airship was opened up to him shortly after World War I when the Navy initiated a new career field for airship mechanics. Before this phase of his life was over he had flown on every rigid airship and was aboard the ill-fated "Macon" when it went down off Point Sur in California. Rescuers came for Andy but only after



ANDY GALATIAN, retiring on May 31, stands with pride near the machines he has worked for the past 15 years.

he had spent long hours in the water.

Moffett was the mooring site for the "Macon," and it was this that brought the Galatian family from Lakehurst, N.J., to Los Gatos in 1933. The era of the airship has passed yet to Andy the memory will always live on.

At 71, Andy is still looking for new worlds to conquer. The only require-

ment — no commuting on the freeways! His plans for the future include indulging in two favorite hobbies — cooking and eating. Both can be accomplished close to the home fires.

No matter where he goes the good wishes of his friends at Ames go with him.

## Aviation Space Writers Touring Ames Today

The Ames Research Center is hosting today (May 24), approximately 150 members of the Aviation Space Writers Association during their annual national meeting in San Francisco.

Representing aviation/space editorial departments of newspapers, magazines, radio, TV, and other media, the nation's foremost aviation writers will be briefed on re-entry heating, space sciences, life sciences, and V/STOL activities at Ames.

During the six-day meeting the writers will visit aviation and space industries in the Bay Area and Sacramento. Their 1956 annual meeting also included a briefing at Ames.

At the annual banquet on May 25 in San Francisco, Dr. Harry J. Goett, Director of the Goddard Space Flight Center and former Chief of Ames' Full Scale and Flight Research Division, will be the main speaker.

## Recreation Roundup

..... Vicki Malatesta

BASEBALL TICKETS ARE AVAILABLE NOW FOR the San Francisco-St. Louis game at Candlestick Park on Friday, June 15, at 8:15 p.m. Jim Patterson (EIB) has about 30 tickets left. Price is \$4.40 per person and includes round trip transportation and reserved seat at the game. Call Patterson at ext. 565 for details and reservations.

THE NASA-SPONSORED 30-DAY TRIP to Europe is getting a good response at Ames. The flight leaves from Friendship Airport, Baltimore, Md., on September 24. First stop is Brussels, Belgium. The itinerary is available at the Astrogram office.

AMES CHORAL GROUP will rehearse on May 29, from 12 noon to 12:30, in the basement of the Instrument Research Laboratory — bring your lunch. Female voices are needed.

ANYONE INTERESTED IN A GROUP TRIP to San Simeon (the Hearst castle) call the Recreation Committee or Vicki, ext. 262.

TICKETS FOR THE BARBEQUE ARE ON SALE.....Get yours now!!!

AMES BRIDGE CLUB WINNERS on May 11 were: Mrs. Dwight Moody and Mrs. Robert Spaulding, first; Alan Levin and Ron Kauffman, second; Mr. and Mrs. Arthur Kaskey and George Callas and Lu Cicolani tied for third. No game last Friday, the 25th, because of the Santa Clara Valley Spring championship meet in Los Gatos. The next regular game will be held next Friday, May 25, and the monthly master point event will be held June 1. Call Art Kaskey, ext. 224, or Ron Kauffman, ext. 250 for details.



# Personnel-ly Speaking

## AMES MERIT PROMOTION PLAN

### II COVERAGE

The Ames Merit Promotion Plan shall apply to all positions except those specifically excluded by actions described below.

#### A. Reclassifications

The upgrading of an employee's own position during his incumbency as a result of his assumption (due to normal job growth) of added duties and responsibilities over a significant period of time does not involve a vacancy affording promotional opportunity for anyone other than the employee in question. Therefore, the promotion of the employee with his position is considered as filling the job by the best qualified person available.

Example: Quite commonly a research engineer conducting research projects or phases of research projects in a research facility will naturally assume greater responsibility and/or be required to perform more difficult work in the conduct of his research investigations and studies due to varying reasons such as expansion of research effort in the program area of his projects, increasing complexity of the research work, and/or individual initiative and creative contribution to the successful conduct of the research investigations. This growth of the individual and his job and resultant grade level promotion or promotions occurring to this individual are not considered promotions within the coverage of the plan. Similar job growth advancements will occur in a great many other occupations.

#### B. Trainees

Promotion of wage board trainees from one trainee grade to the next higher, or from trainee grade to the journeyman level.

#### C. Re-promotion

Re-promotion of employees to positions or grades from which demoted without personal cause.

#### D. Administrative Pay Increases

Upon recommendation of the supervisor, Wage Board employees may be advanced to higher steps within their grades on the basis of individual performance. These administrative pay increases are not subject to the promotion plan. Example: Advancement from WB-10, step 1 to WB-10, step 2; from WB-10, step 2 to WB-10, step 3; etc., are administrative pay increases.

(Next issue: Part III, "Areas of Consideration" and Part IV, "Career Patterns")

## Ames Airings

.....by Sharon Sharmen

(Sharon is vacationing in Seattle with her husband and her mother. They are taking a first-hand look at the Seattle World's Fair and report that it is tremendous. — The Astrogram wouldn't be the same without her column so the Editors will carry on for her.)

News from the new baby department... born to BEN MEYER (EMC) and his wife,

their first child, a girl, Kimberly Mae, born April 12. Weight, 6 lbs., 7 oz. .... born on Mother's Day, May 13, to JOHN FERANDIN (a new employee at ISD) and his wife Elizabeth, a daughter, Elizabeth Nichole, weighing 7 lbs., 3 oz. .... new parents on the list at the 11-by-11-Foot Tunnel: HAROLD ZIMMERMAN and his wife have a son, Scott Christopher, born at the Sequoia Hospital, April 23. Weight, 8 lbs., 6 oz. .... ERNIE RANSTEAD and his wife have a son, Scott Thomas, born at Sequoia Hospital on April 28. Weight, 7 lbs., 4 oz. .... and BOB CHRISTIAN and

his wife have a daughter, Lucinda Jane, born at Sequoia Hospital on April 23, and she weighed 7 lbs., 6 oz.

### Moved. . .

Classification and Wage Administration Branch of Personnel Division, and the Technical Reports and Stenographic Branch of Administrative Services Division have moved to Room 117, Data Reduction Building. Telephone numbers remain the same.



# barbecue Queen candidates



BARBEQUE QUEEN CANDIDATES...One of these young ladies will be elected "Queen" of the Ames Barbeque to be held Saturday, June 2, at Blackberry Farm. All ballots must be mailed in by Monday, May 28. The contestants are (standing from l to r) Carole Fillmore (Voucher Processing), Audrie Swanson (Operations), Beverly Blanchard (Employment), Barbara Ratner (11-Foot), Donna DeVoto (MZB), Billie Williams (Machine Tabulating), Judy Akin (Guid & Cont), Judith Thompson (Central Files), Paula Tischler (Tech Reports and Steno), Carol Rizio (Contracting), Leslie Paul (Training and Transactions).

## BARBEQUE QUEEN CONTEST

### BALLOT

Mark appropriate name and mail ballot to: Hy Zimmer, AFS

- \_\_\_\_\_ Carole Fillmore
- \_\_\_\_\_ Audrie Swanson
- \_\_\_\_\_ Beverly Blanchard
- \_\_\_\_\_ Barbara Ratner
- \_\_\_\_\_ Donna De Voto
- \_\_\_\_\_ Billie Williams
- \_\_\_\_\_ Judy Akin
- \_\_\_\_\_ Judith Thompson
- \_\_\_\_\_ Paula Tischler
- \_\_\_\_\_ Carol Rizio
- \_\_\_\_\_ Leslie Paul

## GOLF

-----by Ruth Richardson

The day dawned clear and sunny as 41 Ames golfers gathered at the Riverside Golf Course last Saturday. Play for the day was a medal play trophy tournament. First place winners in each flight received trophies, second place winners received merchandise certificates, and all other winners received golf balls.

In the first flight Cleo Wagoner and Frank Lazzeroni tied for first with Cleo winning the play off and Frank taking second place. Third went to Paul Barisich, fourth went to Dick Petersen, fifth to Jim Nelan and sixth to Al Petretti.

In the second flight Ernie Medeiros took home the trophy. Second thru sixth places went to Sam Pitts, Nick Vojvodich, Bill Fietzer, Howard Matthews and Mitch Radovich, respectively.

John Van Etten was in great form coming in with a net 68 to take first place in the third flight. Vince Bellamo was second; Russ Fahey, third; Gary Bowman, fourth; Ruth Richardson, fifth; and Carol Tinling was sixth.

The next tournament will be played at Pleasant Hills on June 23.



TROPHY WINNERS... First place winners of the medal play trophy tournament last Saturday were (from l to r) Ernie Medeiros, Cleo Wagoner, and John Van Etten.



# BARBECUE!



10 a.m. - 10 p.m.  
1 p.m. - 4 p.m.

June 2, 1962 - Saturday  
Barbeque Time

BLACKBERRY FARM  
in Cupertino

## ADULT'S MENU

12-ounce Barbecued Steak \$2.50\*  
or  
1/2 Barbecued Chicken \$1.75\*  
AND  
Corn on the Cob Tossed Green Salad Garlic Bread  
Ice Cream Coffee

## CHILDREN'S MENU

Steakburger, Corn on the Cob \$1.00\*\*  
Salad, Garlic Bread, Ice Cream &  
Milk

Tap or Canned Beer - 25¢ Soda Pop - 15¢ Milk - 10¢ Ice Cream - 10¢

(BE SURE TO BRING YOUR OWN SILVERWARE - PLATES AND  
CUPS ARE FURNISHED)

\* Includes \$1.00 Admission to Park  
\*\* Includes \$ .60 Admission to Park



## Committee

Ticket Chairman . . . . . Jim Patterson

Ticket Collection. . . . . Hy Zimmer &  
Ron Kauffman

Ticket Sales . . . . . Vicki Malatesta

Steaks . . . . . Jim Patterson

Chicken & Steakburgers . . . . Richard  
Jones

Refreshments . . . . . Burt Skow &  
Chuck Jackson

Games . . . . . Bob George



## Program

12:00 p.m. Introduction of Barbeque  
Queen and Presentation  
of Trophy

12:15 p.m. Fathers vs. Sons Rope  
Pulling Contest

1:00 p.m. Barbeque Time

3:00 p.m. Egg Throwing Contest

4:00 p.m. Watermelon Eating Contest  
(Adults only)



## BOWLING

The All-Ames bowling league closed out its season with a championship play-off of the three rounds of competition winners — SSFF, Mavericks, and Bahude. After three tight matches the SSFF team came out on top and won the league championship. Mavericks were second and Bahude placed third.

With the bowling season over, trophies were presented to winners of high individual games and series as follows:

Robert Sheaffer	men's high series scratch	618
Barrett Baldwin	men's high game scratch	253
Gerald Mitvalsky	men's high series handicap	741
Toby Gonzales	men's high game handicap	276
Lois Wilkins	women's high series scratch	542
Jean Newell	women's high game scratch	224
Janet Konrath	women's high series handicap	659
Norma Archibald	women's high game handicap	265

In addition to the League awards, the Bowling Association gave out individual awards to the most improved bowlers. Recipients were Jean Newell, WIBC plaque, and Jerry Havill, ABC buckle.

New officers elected to serve the Ames league next year are: Barrett Baldwin, president; Jim Deibert, vice president; Jessie Gaspar, secretary; and Robert Sagramola, treasurer.



LEAGUE CHAMPIONS ... Supersonic Free Flight champion bowling team with trophies. Back row (l to r) Gary Bowman, Robert Carros and Robert Redmond. Front row (l to r) Yvonne Bowman and Janet Konrath.



INDIVIDUAL TROPHY WINNERS ... Back row (l to r) Robert Sheaffer, Gerald Mitvalsky and Barrett Baldwin. Front row (l to r) Norma Archibald, Jean Newell, Toby Gonzales, Lois Wilkins, and Janet Konrath.

## Want Ads

For sale - Eight-inch tilting arbor circular saw with 1/2 horsepower motor, table extensions, rip fence, cross-cut guide, dado set, 4 blades, and portable stand. Good working condition. \$60. Call H. Turner YO 7-6188.

For sale - One pair of field glasses with leather case. Made by Swift, \$14.95. Battery charger 6 and 12 volt combination. \$8.95. Call G. Reid-Seith, ES 7-5539.

For sale - 6-inch metal lathe by Craftsman, 12 inches between centers. Includes face plate, four-jaw chuck, tail stock chuck and dog. One year old. \$85. Call F. Thompson RE 6-5715.

For sale - Dachshund puppies AKC Registered, All shots. \$50 each. Call DA 3-0194.

For sale - Airequip slide trays, excellent condition. \$1.25 each. Call Bob Hughes CH 3-1691.

For sale - 1950 Ford, 4 door. Ideal for mechanic that needs a second car for work. \$100. Call 946-1859 after 4:30 p.m.

For sale - Tear-Drop Trailer, good tires, 1962 tabs. \$125. Call M. N. Thompson YO 7-5840.

For sale - Twelve-volt Allstate evaporative car cooler, hangs from under dash. Used one season, like new. Will include 2 aluminum car window sun screens. \$25. Call R. Matthews. AM 2-1370.

For sale - Mahogany dining room set, 2 end tables and lamps, TV, 12 x 15 rug, overstuffed chair, kitchen set, and G. E. refrigerator. Call AL 2-2693.

For sale - two bedroom house, hardwood floors, fireplace, gas stove. Neat and clean. Three miles from Ames. 378 E. Duane, Sunnyvale. Call RE 9-9029 after 4:00 p.m.

For rent - Two bedroom apartment with all-electric kitchen and laundry, convenient to shopping and freeway, Campbell area. \$95 per month. Phone ES 7-4792.

For lease - With option to buy, 2-story English-style house. 3 bedrooms, 3 baths, living room, dining room, den, study. New walnut built-in kitchen, dishwasher, refrigerator, freezer, table-top range, thermador ovens, washer and dryer. Perimeter heating throughout. all carpets and drapes, some furniture. Willow Glen. \$275 per month. Call E. G. Cook CY 3-3382.

Wanted - Ride from vicinity of Matadero and El Camino Real, Palo Alto. Either shift. Call Kato ext. 275.

Wanted - Ride from vicinity of Stevens Creek & Saratoga Avenue, Santa Clara. 8:00 to 4:30 shift. Call Carol Fillmore ext. 415.

Found - NASA 20-year pin in Presbyterian Church, corner of Cuesta and Mira Monte, Mountain View. Call John Leveen ext. 412.

## Come To the Ames Barbecue!

The **Astrogram** Room 111 Administration Building Phone 385

The Astrogram is an official publication of the Ames Research Center, NASA, Moffett Field, California, and is published bi-weekly in the interest of Ames employees.

Edited by ... Brad Wilson and Don ... chilling Reporters ... NASA Employees

Deadline for contributions Thursday between publication dates.



## NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

# The

# Astrogram

AMES RESEARCH CENTER, MOFFETT FIELD, CALIFORNIA

VOLUME IV

June 7, 1962

NUMBER 17

### Dr. Spreiter on Special Assignment in Europe



A faculty member with student aims will be the dual role this summer for Dr. John R. Spreiter, long time member of the Theoretical Branch, at the Les Houches Summer School of Theoretical Physics at the University of Grenoble, where the dictates of fate turned his student application into a position on the faculty.

The 8-week assignment will afford the Ames research scientist an opportunity to meet and associate with internationally known scientists who will conduct lectures on the physics of the upper atmosphere and solar terrestrial relations. These will be of such prominence as Dr. Sydney Chapman, president of the International Geophysical Year, and Dr. M. Nicolet, president of the International Association for Geomagnetism and Aeronomy.

Located in the shadow of Mont Blanc in the tiny village of Les Houches, France, the school offers intensive study each summer to some 30 students, mostly from about the associate professor level, selected from all over the world. It is here that Dr. Spreiter will organize seminars and study groups to assure

(Continued on Page 4)

### George Edwards To Head New Office of Applications



George G. Edwards has been appointed Ames Applications Officer concurrent with the establishment of the Ames Office of Applications, it was announced recently by Dr. Smith J. DeFrance, Director of the Ames Research Center.

Reporting directly to the Office of the Director, the new function will support and facilitate operations of the NASA Headquarters Office of Applications directed by Morton J. Stoller.

Strongly supported by NASA Administrator James E. Webb, the NASA Office of Applications is formulating a nationwide program to insure that scientific and technological developments from the NASA programs are made available and used to the maximum extent in the Nation's economy.

"We know that a tremendous number

of innovations arise from the vast expenditures to promote our objectives in space," Edwards said, "and they have a general application in industry with a potential capable of improving life on Earth." He went on to say, "The problem is to transform technological innovations from the space program into direct, every-day benefits. The task, in its scope and context, is new and unequalled in that it will embrace most scientific disciplines and technological fields."

The present NASA reporting system does not fulfill the need. First, because the technical reports present research results, omitting all techniques and devices not pertinent to the explanation of the results; secondly, the reports are

(Continued on Page 4)



## Astroventuring... ★ with Walt Krumm

### SUMMER ACTIVITIES

We have eight or nine amateur astronomy clubs in the Bay Area, from Marin to San Jose. These clubs are planning summer activities for members and their friends, as well as the public and included on the agenda will be many "Star Parties."

Some people may wish to visit these clubs to get acquainted so we will list them in subsequent issues of the Astrogram. Visitors are welcome and the club members are happy to have you visit their activities. The meetings usually include speakers, pictures, film, and current events. Quite often the guest speakers are professional astronomers with subjects of interest to the amateur.

The "Star Parties" are get-togethers for observing at some location where the sky is good. At the Skaggs Point area the observing is limited to evening view with no camping facilities. At Mt. Diablo and Mt. Tamalpais the Star Parties are overnight affairs where one takes along a sleeping bag and food for breakfast. And Palo Alto has a Star Party for the public right in the middle of town.

## Ames Airings

..... by Sharon Scharmen

Thanks to the Editors for keeping my column going while Paul (my husband) and I visited the Seattle World's Fair. We are back now and I'd like to report on some of our activities there. We saw everything (sore feet to prove it) and thoroughly enjoyed the whole show. The NASA exhibit is very impressive — saw Harry De Voto for a fleeting moment as he whisked by with a visitor. The space needle is thrilling and young and old enjoy it. Special highlight of our visit occurred while we were touring the Japanese Village — I was pleased and surprised to be asked to participate in a Japanese tea ceremony! The country up there is beautiful but the weather was miserably cold. .... Now to the new baby parade... It's the fourth for JACK BOYD (Office of the Dir.) and his wife, with the arrival on Memorial Day (May 30) of a daughter, Julie Ann. Now it is two boys



AMES VISITORS... Staff writers of Aviation Week magazine visited the Center recently to collect and research material on the Ames Research Center for the special NASA issue to be published on July 2. Mr. Robert M. Crane, Chief of the Aero-Thermodynamics Division, is shown briefing (standing from left to right) Barry Miller, Assistant Avionics Editor; Irving Stone, Chief of the Los Angeles Bureau; Edward H. Kolcum, Space Technology Editor; and Evert Clark, Chief of the Washington Bureau.

## Recreation Roundup

..... by Vicki Malatesta

ATTENTION FISHERMEN! Herb Mills (EIB), ext. 424, is the man to contact if you are interested in a week-end at Trinity Lake, 30 miles from Redding. For the wives and children of the hardy fishermen, there is a fish hatchery to visit.

DESIGNS FOR NEW MEMBERSHIP CARDS were submitted by the Ames Stamp Club members at their business meeting held Friday (June 1) in the Cafeteria. The card is to be given to all members and will entitle them to a 15% reduction on albums and supplies at a local stamp store.

THE ICE FOLLIES IS THE NEXT PROJECT of the Ames Recreation Committee. If you are interested in going to the Follies by Greyhound Bus call Ron Kauffman, ext. 252. Thirty-three people are needed to charter the bus. If you let Ron know right away this may solve a transportation problem and enable a fellow Ames employee to attend the ice show.

CHORAL GROUP REHEARSALS are every Tuesday noon — 12:00 to 12:30 — in the basement of the Instrument Research Laboratory. Twenty four choristers turned out for rehearsal last week.

AMES BRIDGE CLUB WINNERS on May 25 were: Mr. and Mrs. Jack Tunnell, first; Jessie Gasper and Margaret King, second; Mr. and Mrs. Ed Collins and Elwood Stewart and George Callas tied for third. — Winners of the Monthly Master Point Night (June 1) were Layton Yee and Harry Bailey, first; Bob Merrick and Russ Edwards, second; Mrs. Jerry Dickson and Mrs. M.R. Meyer, third; and Mr. and Mrs. Robert Spaulding, fourth.

and two girls. "She's beautiful," says the proud father, "21 inches long and weighs 8 lbs. and 1 oz." The whole family was at the movies when the baby decided to be born — a dash to the hospital became the main feature.... Also on

the list of proud parents are JAMES ROBINSON (EIB) and his wife, with the arrival of a baby boy born May 10, at 6:55 p.m. Mark Francis weighed 7 lbs. and 1 1/2 oz., and was 19 inches long at birth.



## Personnel-ly Speaking

### AMES MERIT PROMOTION PLAN

The discussion of the Ames Merit Promotion Plan continues this week with "Areas of Consideration" and "Career Patterns."

#### III AREAS OF CONSIDERATION

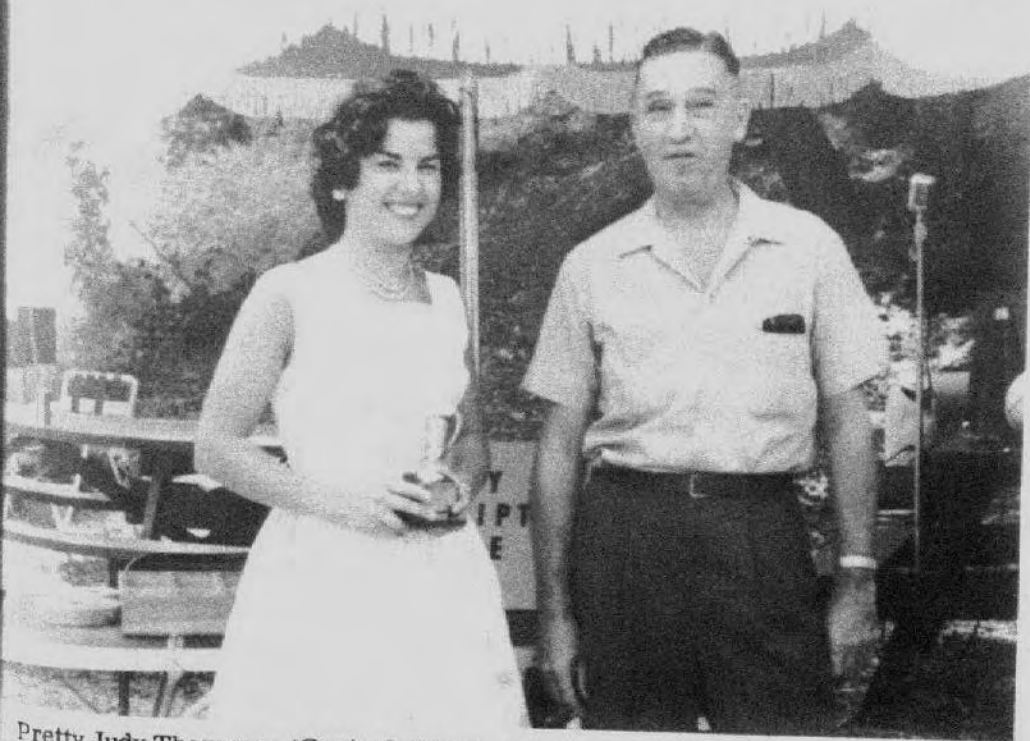
Areas of consideration will be Center-wide, division-wide, or branch-wide as determined by the Personnel Division and dependent on the nature of the position in question.

#### IV CAREER PATTERNS

In the operation of the promotion program, normal career patterns reflecting the potential advancement of employees from lower to higher grade levels in the same or a related line of work will naturally result due to and depending on the experience and training requirements of the higher grade level positions and the needs of the organization. The advancement of a particular employee to higher grades in the same line of work or the reassignment to another line of work providing greater opportunity for advancement will be based on the demonstrated capabilities, interests, potential, training, educational and experience background of the individual employee. To as great a degree as possible, low level, "dead end" jobs will be kept at a minimum, and employees who have demonstrated their capabilities will be given the opportunity whenever practicable for reassignment to other lines of work providing greater advancement possibilities.

In many occupations advancement to certain higher grade levels can reasonably be expected by any employee if his performance and training progress are satisfactory, whereas opportunity for subsequent promotions to still higher grade levels will depend on the needs of the organization for employees to perform the higher grade level duties. For example, a trainee or apprentice machinist can reasonably expect to advance with satisfactory performance and training progress to the journeyman machinist level. Advancement to higher graded machinist or toolmaker positions will depend on the organization's needs as well as the individual's performance. The systematic advancement of the trainee machinist to the journeyman machinist level and subsequent promotions to higher graded machinist or toolmaker positions are exempt from the coverage of the promotion plan. However, promotions to leader or supervisory positions are subject to the promotion plan.

### Judy Thompson Elected Barbecue Queen



Pretty Judy Thompson (Central Files) was chosen by Ames employees to reign as Barbecue Queen for 1962. Judy is pictured receiving the Queen's trophy from John F. Parsons, Associate Director, during festivities last Saturday (June 2) at Blackberry Farm.

### Professional Papers

(As a service to our readers a list of all research papers written by Ames Scientists for presentation of publication will appear in this column.)

"Use of Variable Stability and Control X-14 VTOL Aircraft to Determine Control Power Requirements" by L. Stewart Rolls (FSS) and Fred J. Drinkwater, III, Operations. Presented at the 18th Annual National Forum of the American Helicopter Society, Washington, D. C., May 2-4.

"Radiation from Wakes of Blunt Bodies at Speeds up to 32,000 Feet Per Second" by Jack D. Stephenson (SSFF). Presented at the Anti-Missile Research Advisory Council Symposium, San Diego, May 1 and 2.

"Lift Control During Entry From Supercircular Velocity" by Rodney C. Wingrove and Robert E. Coate both of the Flight and Systems Simulations Branch. Presented at the Institute of Aerospace Science National Meeting on Manned Space Flight, St. Louis, May 1.



## NASA Spacemobile Here for Month of June

The NASA Spacemobile has returned to the San Francisco Bay Area and has been scheduled for showings by the Ames Research Center during the month of June.

Normally scheduled out of NASA Headquarters, Ames took on this responsibility for this month because of the varying school-closing dates in the area.

Over 40 programs have been scheduled, ranging from elementary schools to colleges and from community service clubs to Scout-O-Ramas. With most showings in Santa Clara County, the travelling space science demonstration unit will be seen from Monterey to San Francisco.

Garth Hull, who presented the program with a colleague to three Ames audiences last April, is now operating the Spacemobile alone. Garth is a former



high school science teacher and was a travelling science teacher for the National Science Foundation before joining the NASA program.

EDWARDS . . . . .

(Continued from Page 1)

aimed at technical people in the space and aeronautics community and may be phrased in such a way that a non-space oriented industrial application goes unrecognized.

The objectives of the Applications Program are to provide a system not only to disseminate the information but equally important, to identify, document, and evaluate innovations.

Mr. Edwards feels that it is too early to predict what pattern this program will take but he indicates that identification and documentation of the back-log of NASA innovations is fundamental and he will begin this task immediately.

In discussing the term "innovation" as applied to NASA work, Mr. Edwards defined it as "A means of accomplishing a work objective either more effectively than before, or for the first time." The term includes invention, discovery, development, modification, or new use of a device, process, material, system or technique.

During his nearly 22 years with NASA and its predecessor organization, Mr. Edwards has engaged in a wide variety of aerodynamic research and has contributed to some of the nation's most advanced aeronautical research projects. He is a member of the American Rocket Society, and is currently serving a second term as Vice President of the organization's Northern Calif. Chapter.

SPREITER . . . . .

(Continued from Page 1)

maximum contact between students and lecturers.

At the close of the summer school Dr. Spreiter will go to Aachen, Germany, where he will lecture at the Symposium Transsonicum on "The Local Linearization Method in Transonic Flow Theory." His paper discusses the aerodynamics of wings and bodies at transonic speeds.

Accompanied by his wife, Brenda, and their two children, Terry, 8, and Janet, 4, Dr. Spreiter began his busy summer schedule this week in Washington, D. C., where he will attend a meeting of the Ionospheric Physics Sub-Committee at NASA Headquarters.

Included in the itinerary for the trip to Europe will be a visit to Wallasey near Liverpool, England, the home of Mrs. Spreiter — some walking in Wales and the Lake District — then on to France where Dr. Spreiter will attend a symposium in Paris on "Theoretical Interpretations of Upper Atmosphere Emissions," before going to Les Houches.

**The Astrogram** Room 108  
Administration Building  
Phone 385

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Managing Editor . . . . Brad Wilson  
Editor . . . . . Dot Evans  
Reporters . . . . . NASA Employees

Deadline for contributions:  
Thursday between publication dates

## Want Ads

For sale - Set of chains with tightners for 5.60 x 15 tires. \$8.50. Call 253-2929.

For sale - Undercarriage for boat or utility trailer. Built by Mastercraft. 12" wheels and tires. Also, girls bicycle, 26", 3 - speed racer. Call YO 7-5481.

For sale - 1951 Buick, 4 door sedan. New recaps, good commute car. Call 793-0298 after 5:00 p.m.

For sale - Must sell beautiful white 1961 Impala Convertible. \$2500 or best offer. Call 591-0841.

For sale - Silvertone stereo console, AM/FM radio, 50 LP records. \$200 or best offer. Call Henry Pfister CL 8-2758.

For sale - 1959 Evinrude, 50 h.p., electric starter, long shaft. Excellent condition. Call RE 6-7984 after 5:00 p.m.

For sale - Foothill College texts: Calculus with Analytic Geometry, Taylor, \$7.50; Modern Introductory Physics, Freeman, \$5.00; Geometry, Brumfiel, \$3.00; What is Philosophy, Sprague, \$1.00; The Enduring Question, Rader, \$3.50; Value and Obligation, Brandt, \$4.50; Understanding English, Roberts, \$2.50; Ed Crimmins, 761 Hope Street, Mountain View.

For sale - 3 bedroom, 2 bath home, 20 ft x 40 ft gunite pool, filter; large patio and cover, children's play yard, oversized lot, well landscaped, all electric kitchen, barbecue. \$21,500, \$2000 down to new FHA loan on \$19,500. 10872 West Estates Drive, Cupertino. Call AL2-4830.

For Rent - Two sleeping rooms in private home. One room with private bath (tub, shower, instant hot water). Two rooms may be had with private bath between. Residential area, quiet cul-de-sac with off street parking. David Avenue off Lewis Road, South Palo Alto. Summer rate, \$48 and \$50 per month. Call DA 2-1888 late afternoon or evenings.

Wanted - 6.70x15 tubeless tires. Used but in good condition. Call Don Moody RE 6-5393.

Wanted - To join or form ride group from Story Road area of East San Jose. 7:30 to 4:00 shift. Call Henry Pfister CL 8-2758 or ext. 293.

## Reservations for Ice Follies

Reservations are now being taken by the Ames Recreation Committee for the 1962 edition of the Shipstads and Johnson Ice Follies.

Andree and Don Jacoby, 1958 and 1959 United States Dance Champions remain as stars of the show. They have changed their routine completely and will offer a spectacular new number "Medley in Motion" for the 28th annual ice show.

Ames employees are invited by the Recreation Committee to take advantage of group rates to see this outstanding show on Ames Night, Sunday, July 15, 5:30 p.m. at the Winterland arena in San Francisco.

Ron Kauffman (8-by 7-) has been appointed ticket chairman by Hy Zimmer, Ames Recreation Committee Chairman. Reports are that we have a good block of seats on the main floor and also in the balcony. Get your choice — make your reservations now.



# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

# The

# Astrogram

## AMES RESEARCH CENTER, MOFFETT FIELD, CALIFORNIA

VOLUME IV

JUNE 21, 1962

NUMBER 18

### Ames Focal Point of Seminar

The importance of the Ames Research Center in the fields of biology, aeronautics, and aerospace has resulted in a week-long Biology-Aerospace Seminar now being held by the State Department of Education at the Holiday Inn.

Moved from its originally planned location at the University of California at Santa Barbara to Mountain View, the seminar is composed of 12 high school and junior college biology and aeronautics teachers. Their purpose is to examine those principles of biology that have implications for youth destined for careers in aviation and space exploration. Based on their findings, a major curriculum policy statement is expected.

A highlight of the seminar was an Ames briefing on Life Sciences yesterday (June 20), followed by a tour of the Center's facilities. The program was preceded with a NASA Spacemobile demonstration by Garth Hull.

"The new location," said Mr. W. Earl Sams of the California Department of Education, "has been selected because of the tremendous opportunity provided by NASA and Ames Research Center."

### X-15 PILOT HONORED

Neil A. Armstrong, test pilot-engineer for NASA's Flight Research Center at Edwards, California, has been named 1962 Octave Chanute Award winner, it was announced recently by the Institute of the Aerospace Sciences (IAS), sponsors of the annual award.

### Glen Goodwin to Present Paper at International Symposium in Paris

Glen Goodwin, Chief of Heat Transfer Branch, will leave Ames on Friday (June 22) for Paris, France, where he will present a paper before the Triosieme Symposium International Sur La Dynamique Des Gaz Rarefies, at the biennial meeting June 26-30.

Mr. Goodwin's paper, "Production and Diagnostics of Hypervelocity Low-density Streams," discusses methods of producing in the laboratory the air velocities and densities encountered by spacecraft during the early portion of their re-entry flights into the atmosphere of the Earth and near planets.

During his more than 15 years with NASA and its predecessor organization, Mr. Goodwin has studied flows of the type discussed in his paper in addition to the more mundane continuum aerodynamics. He is a charter member of the



"Rarefied Gas Dynamics Gang," sponsors of the Paris meeting.

Combining his vacation with the business trip, Mr. Goodwin and his wife plan a short tour of Frankfurt and Copenhagen before going on to England for their return flight.

### CONTRACT LET FOR NEW CAFETERIA

Announcement was made on Thursday (June 14) that the construction firm of Nielsen and Nielsen, San Jose, had been awarded the contract to build the new Ames Cafeteria. According to the contractor, work will begin almost immediately.

The building will be located on the triangular piece of ground near the intersection of King, Durand and McCord Roads. It is anticipated that the air-conditioned structure will seat between 300 to 400 persons, and will contain the latest in food preparation equipment.

### North to Talk Here Friday

Warren J. North, Chief of Flight Crew Operations Division, Manned Spacecraft Center, Houston, Texas, will be guest speaker at a meeting of the American Astronautical Society to be held in the Ames auditorium on Friday, June 22, at 8:00 p.m.

According to Bryan Doolin, Guidance and Control Branch, North will discuss the Gemini project and the operational design experience gained from the Mercury project.

The meeting will be "open" and all interested Center personnel are invited to attend. If further details are desired, call Bryan Doolin, extension 413.

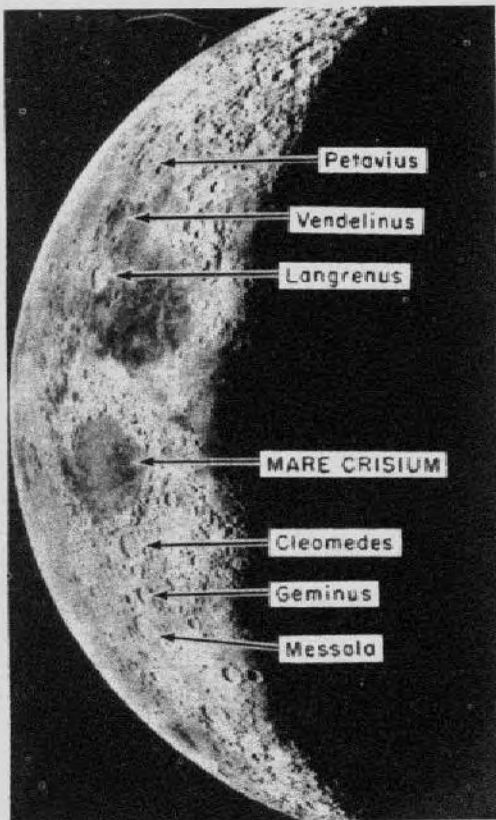


## Astroventuring...

★ with walt krumm

### THE MOON

"Spaceflight No. XXa landed on the Moon 60 miles NNE of Landsberg." Do you know where that is? If we had said that flight No. XXa had landed at Lowry Field, Denver, on its return, we would know for we are familiar with a map of the United States. Yet, there are more than 500 features on the moon with names, and many more of the less prominent, objects with designations. Because of increasing interest, the Astroventurer will run a "Know the Moon" series.



Start any night and take a good look at the moon when it is above the horizon. Many of its broad features are discernable with the naked eye. Then look at the moon through binoculars and be amazed at the detail that can be seen. Under optical power and good "seeing" conditions, even the smallest telescope will reveal delicate objects to an observer familiar with them.

View the moon with low power and under varying conditions of sunlight and shadow. The best view of an object on the moon's surface is to be had when it is on the terminator, as the boundary between the illuminated and the unilluminated portion of the moon is called. So let us learn our moon as the terminator moves across and presents new and additional features each evening. (Next New Moon is July 1. We will use a 3 or 4 day moon — say July 4 — to start with.)

# Personnel-ly Speaking

## AMES MERIT PROMOTION PLAN

The discussion of the Ames Merit Promotion Plan continues this week with "Qualifications," and "Identifying Qualified Candidates."

### V QUALIFICATIONS

The minimum qualifications for any position are those prescribed by the Civil Service Commission. These standards shall, in general, be the standards contained in examination announcements, Handbook X-118, or previously approved agency developed, non-competitive standards. Any special knowledge, personal attributes, or skills needed over and above those provided by the Commission will be established in advance and will be made a matter of record.

### VI IDENTIFYING QUALIFIED CANDIDATES

The Personnel Division will screen personnel records and files already available and consult with appropriate Branch Chiefs and Division Chiefs to identify all qualified employees in the area of consideration. It will not be necessary for employees to file or request consideration for such promotional opportunities. All qualified personnel will be given consideration. When it becomes advisable, the Personnel Division will advertise vacancies and solicit applications.

(Next issue: Part VII, "Evaluation of Qualifications")

Mare Crisium, or Sea of Crises, as it is called, is the most prominent feature on a 3 or 4-day moon. Its dark hue makes the analogy to a sea very striking. It is 350 miles long from north to south and 280 miles from east to west. Cape Agarrum juts out into the sea on the southeast and rises 11,000 ft. above the level of the dark plain. There are two craters on the sea's floor. The southern one is named Picard (French Astronomer, 1620-82), and the northern, Pierce (American mathematician, 1809-80). Other and smaller craters on the borders of Mare Crisium include Lick (American millionaire and founder of Lick Observatory, 1796-1876), Yerkes (American financier and patron of astronomy, 1837-1905), and Cooke (English amateur astronomer, 1886 -, contemporary).

On the moon, north is up as viewed by the naked eye, and east is to the right. In a telescope the image is usually inverted with south up and west to the right.

North of Mare Crisium is the crater Cleomedes (Greek astronomer, 50 B.C.) It is 80 miles in diameter. On its eastern wall is the very deep crater Thallos. Further north note the craters Geminus and Messala.

To the south of Mare Crisium look for the craters Langrenus, Vendelinus, and Petavius.

## Milestones in Aeronautics and Space

Milestones in aeronautics and space interest to Ames personnel from *Aeronautics and Astronautics 1915-1960*, an American chronology of science and technology in the exploration of space by E. M. Emme, NASA Historian. 10 years ago - "June 18, 1952, Julian Allen, of NACA Ames Laboratory conceived the 'blunt nose principle' which submitted that a blunt shape would absorb only one-half of 1 per cent of the heat generated by the re-entry of a body into the earth's atmosphere. This principle was later significant to ICBM nose cone and the Mercury capsule development.

### The Astrogram

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Managing Editor . . . Brad Wilson  
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Deadline for contributions:  
Thursday between publication dates



## Reservations for Ames Night at Ice Follies

Reservations for Ames Night at the Ice Follies on Sunday, July 15, 5:30 p.m., are still available. Special rates have been arranged and include \$4.00 tickets for \$2.90 and \$3.50 tickets for just \$2.40 for main floor or balcony. All seats are reserved. And for your convenience the Ames Recreation Committee is offering a "reserve now and pay later" plan.

Ron Kauffman (8-by-7-), ticket chairman for the Committee, suggests the use of the order blank when making reservations.

Dear Ron:

Date \_\_\_\_\_

Please reserve \_\_\_\_\_ Ice Follies Tickets @ \$2.90 (reg. \$4.00)

Total \$ \_\_\_\_\_

Reserve \_\_\_\_\_ Ice Follies Tickets @ \$2.40 (reg. \$3.50)

Total \$ \_\_\_\_\_

Grand Total \$ \_\_\_\_\_

Name \_\_\_\_\_

Branch/Division \_\_\_\_\_

Make checks payable to:  
Ames Recreation Committee



ICE FOLLIES STARS, ANDREE AND DON JACOBY

## Ames Airings

..... by Sharon Scharmen

The first engineer from the 40- by 80- to attend the World's Fair in Seattle was KEN MORT and his wife, Irene. They enjoyed most of the fair but were disappointed in some of the displays. The view from the space needle restaurant, where Ken and Irene ate lunch, was described as "tremendous." They advise touring the rest of Washington while in the area.. ROBERT KUBIN (Phys) and his wife, Mary, are the proud parents of a 3.07 kilogram, 38.2 centimeter baby boy born on June 10 at their home - by preference. They stated that it beats dashing to the hospital in the middle of the night.....A 5 and 1/2 lb. baby boy was born to BEN ZEITMAN (M.Z.B.) and his wife, Ginger, on June 2. They named the blessed bundle Daniel Lee.....The oldest daughter of BRAD WICK (FM) has the special privilege of representing the United States as an exchange student in Greece this year. Brad and his wife are understandably very proud of her. She will be sailing soon for Athens and the experience of a lifetime.....VIRGINIA HUGHES (Phys) had a week-end visitor from Columbus, Ohio, recently - a girl she had worked with at IRS for 5 years who retired March 30 after 27 and 1/2 years of Federal service with 1200-plus hours of sick leave left over. Virginia feels this is some sort of a record ..... Ames'

## Recreation Roundup

..... by Vicki Malatesta

A BOAT TRIP TO CANDLESTICK PARK for the Giants-Dodgers baseball game on Sunday, August 12, has been arranged by the Ames Recreation Committee's Jim Patterson. The price is \$5.80 per person and includes boat trip plus reserved seat at the game. The boat leaves the Redwood City Yacht Club at 10:30 a.m. The trip takes an hour and a half up and the same length of time for return. There are just 40 tickets available - deadline for reservations is July 15. For information and reservations call Jim Patterson (EIB) ext. 565.

ATTENTION! All Ames employees interested in playing softball in an Ames softball league - games will be played once a week (not Tuesday) immediately after work (5:00 p.m.). Location - either Moffett Field or close to it. Interested personnel call Bob Nysmith, ext. 424.

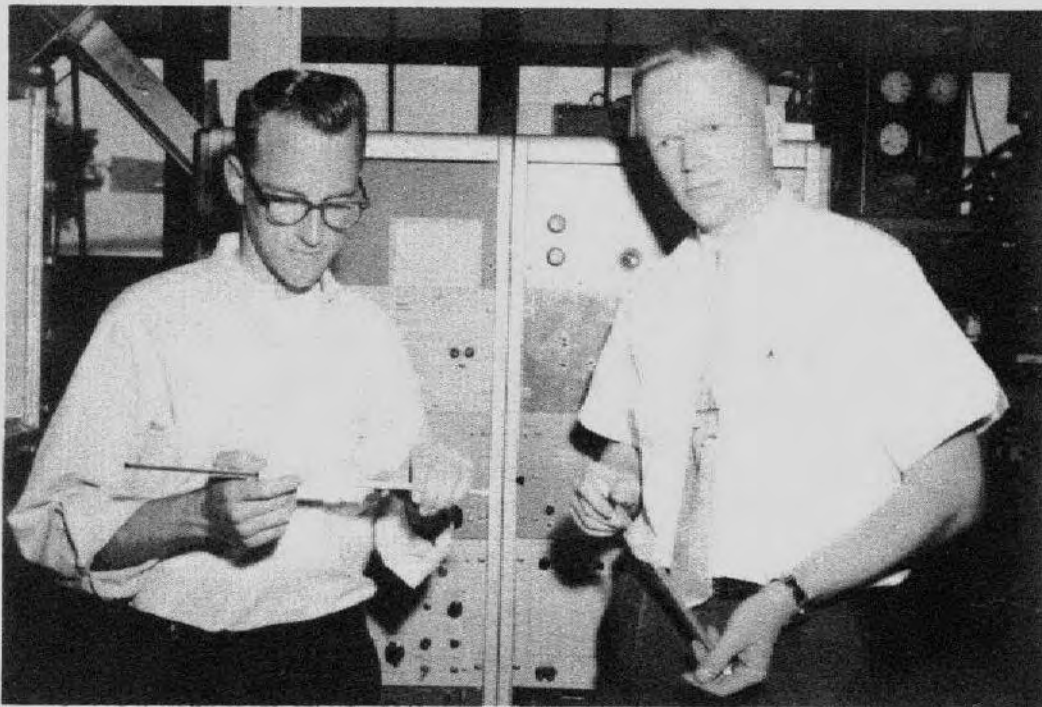
CHORAL GROUP REHEARSALS are every Tuesday noon - 12:00 to 12:30 - in the basement of the Instrument Research Laboratory. Sopranos are needed! AMES BRIDGE CLUB WINNERS on June 8 were: George Callas and Lou Cicolani and Bob Merrick and Russ Edwards, tied for first; Mrs. Robert Merrick and Mrs. Russ Edwards, third. - June 15 winners were: Ron Kaufmann and Alan Levin, first; Mr. and Mrs. Ed Collins and Mr. and Mrs. Robert Spaulding tied for second; Mr. and Mrs. Tom Snouse, fourth.....Master Point Night is July 6, 7:30 p.m.

Fire Marshall, CLARENCE SNYDER, decided to wave goodbye to his two years of bachelorhood and take the marriage vows. He and Helen Caffot were married on June 9 in the First Baptist Church of San Jose. They took a honeymoon trip to the beautiful area around Carmel and Monterey, staying at Lover's Point. The happy bride and groom are now residing in San Jose.....It seems we in the Administration Building have a celebrity.

among us, MARGARET LUNDELL (Central Files) has been a member of the TOPS (Take Off Pounds Sensibly) Club, a nation-wide organization to help those of us who have a tendency to gain a little weight. Margaret has been under a doctor's watchful eye during the last year or so and has reached an unbelievable goal of losing 80 pounds! We all wish her the very best of everything and congratulate her on a remarkable feat.



## Ames Offers Summer Jobs to Student Engineers



STUDENT ENGINEERS CHARLES LANDRAM (L) AND KEITH SWITZER (R)

Across the country this month, hundreds of college students are being lured to industry, government, recreation areas, and the like, as summer jobs temporarily replace academic endeavors. And as the first of some twenty student engineers started to work here last week the question came to mind, "What brought them to Ames?"

To find the answer we checked with Glen Goodwin, Chief of Heat Transfer Branch, and got the "go" for an interview with Charles Landram and Keith Switzer, two students assigned to his organization.

According to Landram and Switzer, they both took part in group interviews at college that were conducted by the Ames recruiting team. Landram said, "Mr. John Dimeff gave an excellent run-down on projects that I am keenly interested in. After talking to him I was convinced that Ames was the place for me. It all sounded like the kind of work I wanted to be doing — challenging, too."

Switzer was interviewed by Victor Stevens and he reasoned, "This is my first job in an organization like Ames and I appreciate the opportunity to work in my field. I wanted to come here because of the invaluable experience and interesting work." Then he went on to say, "propulsion systems were of interest to me even before starting college but I didn't know what was open, now it all ties in."

Charles Landram was graduated from the University of California at Berkeley this month with a Bachelor of Science

Degree in Mech. Eng. He is a candidate for a Master's Degree at U.C. and will continue his studies there this fall.

The 23-year-old U. C. student is a member of Phi Beta Kappa, also Tau Beta Pi, engineering honor society, and Pi Tau Sigma, mechanical engineering honor society. His work here will be to measure the density of high energy gas streams produced by electric arc heated wind tunnels using X-ray scattering techniques.

Keith Switzer is a senior at Washington State University in Pullman, Washington, where he is majoring in mechanical engineering. This 22-year-old student is president of the University's Chapter of Tau Beta Pi, and a member of Sigma Tau, both engineering honor societies. As an undergraduate he is also a member of Phi Kappa Pi, scholastic honor society. He has served two years in the U.S. Navy and is presently in the reserve program.

Vincent Pettine, acting personnel officer, said that most of the summer appointments are for 90 days. The salary range for the group is from \$4040 to \$6345 per year.

As the remainder of the group report for duty they will be placed in various divisions throughout the Center — Aero-Thermodynamics, Vehicle Environment, Full-Scale and Systems Research, Biotechnology, Instrumentation, etc.

Many states and colleges are represented by the student-engineers. The most distant schools represented are the University of Detroit and the University of Kansas.

## Want Ads

For sale - Mark #5 Shopsmith, \$200. Call Seymour, RE 9-0473.

For sale - Approx. 60 feet of new galvanized pipe (1" in diameter). A bargain. Call CH 3-3390.

For sale - All maple youth bed, complete with side rails, spring and newly rebuilt 168-coil mattress, size about 33 in. x 66 in. Price, \$10. — One two-pane 4 ft. x 4 ft. aluminum casement window with right hand crank operated ventilation. \$5.00. Call Bob Ross, AX 6-6496.

For rent - 2 bedroom duplex apartment, unfurnished, \$100 per month. \$110 with gardner. Call YO 7-1867.

For rent - New deluxe triplex. Furnished apartments with kitchens, sleep 4, private beach, boat ramp, walk to casino and beach. \$150 per week. Stateline-Lake Tahoe, Calif. For reservations call CH 8-7920 after 6:00 p.m. Photos available for viewing.

Wanted - Used outdoor gym set for youngster. Must be in safe condition. Call SY 7-4371.

Wanted - Musicians for Sunnyvale's Adult Band. Meet Monday evenings from 7:30 to 9:30. For details call John McHenry, director, RE 9-8517.

Wanted - One or two riders from vicinity of Winchester and Stevens Creek Roads. 7:30 to 4:00 shift. Call R. Tate, ext. 281 or AX 6-7142.

Wanted - Ride from Tennyson Avenue and Alma Street, Palo Alto. 8:00 to 4:30 shift. Call W. Johnson, 325-4619.

Wanted - Ride arrangement from Los Gatos to Ames. 8:00 to 4:30 shift. Call Emma Cushman, ext. 506 or EL 4-8180.

Wanted - Choral selections for mixed voices or information leading to location of same. For Ames Choral Group. Call Frank Cota, CL 1-2081.

## GOLF

... by Ruth Richardson

Just a reminder to all the Ames golfers that our next tournament is June 23 at Pleasant Hills Golf Club. Tee off begins at 7:00 a.m. Play for the day will be a best ball twosome. Reservations must be in no later than noon, Thursday, June 21. Call Mitch Radovich, ext. 232, or Bruce Tinling, ext. 413.

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Golf story from Dick Greif (witness): "It is small wonder that Jim Daugherty (8-by7-) complains that he needs a higher handicap to compete in the Ames Golf Club tournaments. During a practice round at Fairway Glen on June 7, Jim was lying 11 (eleven) beneath a station wagon on the clubhouse parking lot 110 yards from the 18th green. He picked up in disgust and cancelled all bets!"